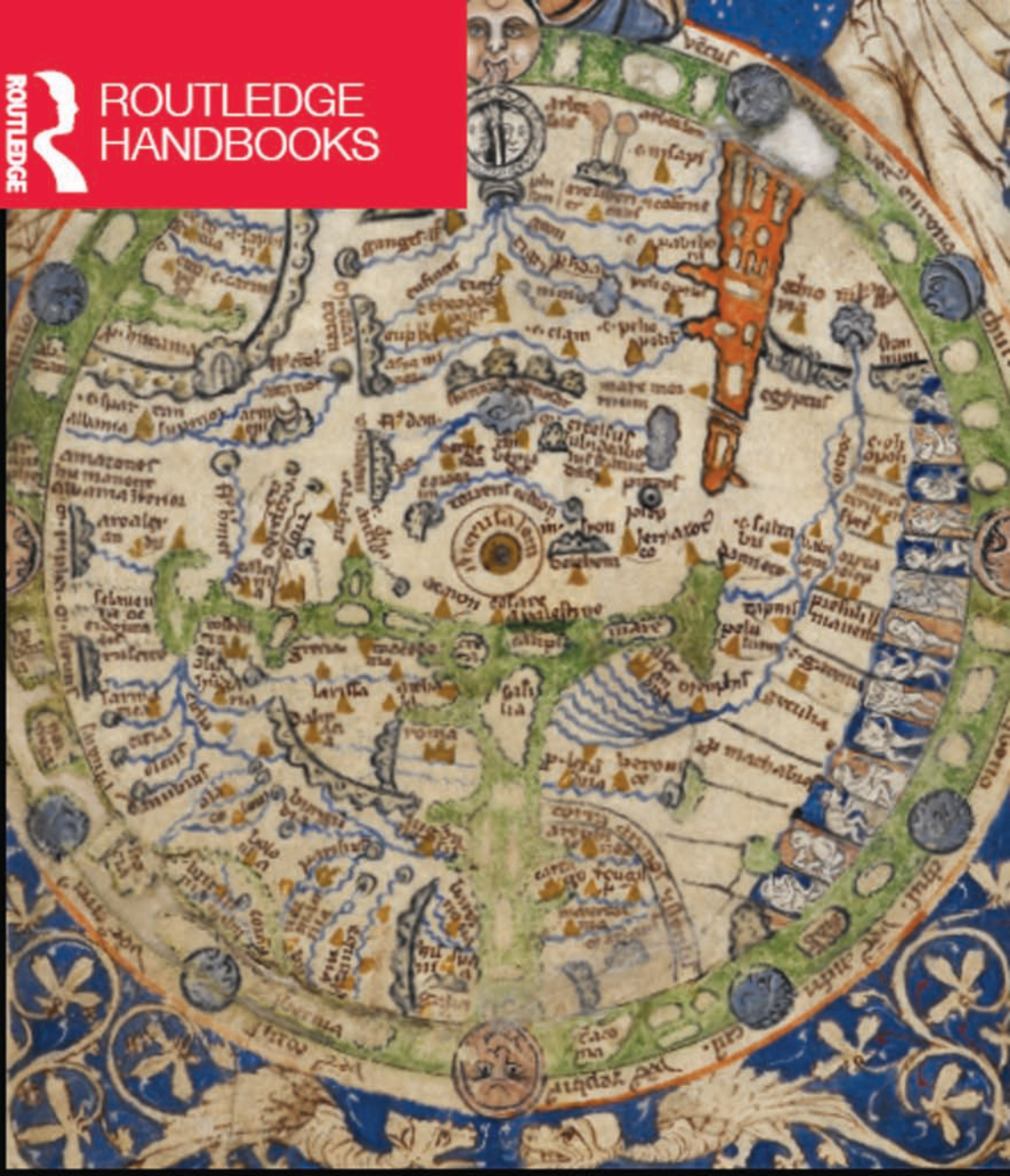
ROUTLEDGE HANDBOOKS



The Routledge Handbook of Identity and the Environment in the Classical and Medieval Worlds

Edited by Rebecca Futo Kennedy and Molly Jones-Lewis

THE ROUTLEDGE HANDBOOK OF IDENTITY AND THE ENVIRONMENT IN THE CLASSICAL AND MEDIEVAL WORLDS

The Routledge Handbook of Identity and the Environment in the Classical and Medieval Worlds explores how environment was thought to shape ethnicity and identity, beginning from developments in early natural philosophy and historical ethnographies. Defining 'environment' broadly to include not only physical but also cultural environments, natural and constructed, the volume considers the multifarious ways in which environment was understood to shape the culture and physical characteristics of peoples, as well as how the ancients manipulated their environments to achieve a desired identity. This diverse collection includes studies not only of the Greco-Roman world, but also ancient China and the European, Jewish and Arab inheritors and transmitters of classical thought.

In recent years, work in this subject has been confined mostly to the discussion of texts that reflect an approach to the barbarian as 'other'. *The Routledge Handbook of Identity and the Environment in the Classical and Medieval Worlds* takes the discussion of ethnicity on a fresh course, contextualizing the concept of the barbarian within rational discourses such as cartography, medicine, and physical sciences, an approach that allows us to more clearly discern the varied and nuanced approaches to ethnic identity which abounded in antiquity. The innovative and thought-provoking material in this volume realizes new directions in the study of identity in the classical and medieval worlds.

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There are books you can write alone, and books that take a village to write. This is one of the latter. The scope of the topic is so vast and the source material so dispersed that it is hardly possible for one person to cover it all adequately. Thus was born this project and now, nearly four years after proposing the volume, it is done.

With that in mind, thanks are due first and foremost to our contributors, both for the work you hold in your hands and the inspiration and education they gave us both as editors and scholars. The range of expertise here represented is truly vast, and we are proud to have worked with such a group of passionate and insightful scholars.

The early drafts were passed through peer review, both that of the editors and outside readers. Thanks to the press reviewers: Benjamin Isaac, Paul Keyser, and Michela Sassi for their thoughtful and astute comments on the proposal and abstracts. Thanks also to Max Goldman, Duane W. Roller, and Laurence Totelin for the extensive time and thought they put in to giving us and our co-contributors valuable feedback. Thank you to other reviewers who wish to remain anonymous. We appreciate your time and comments.

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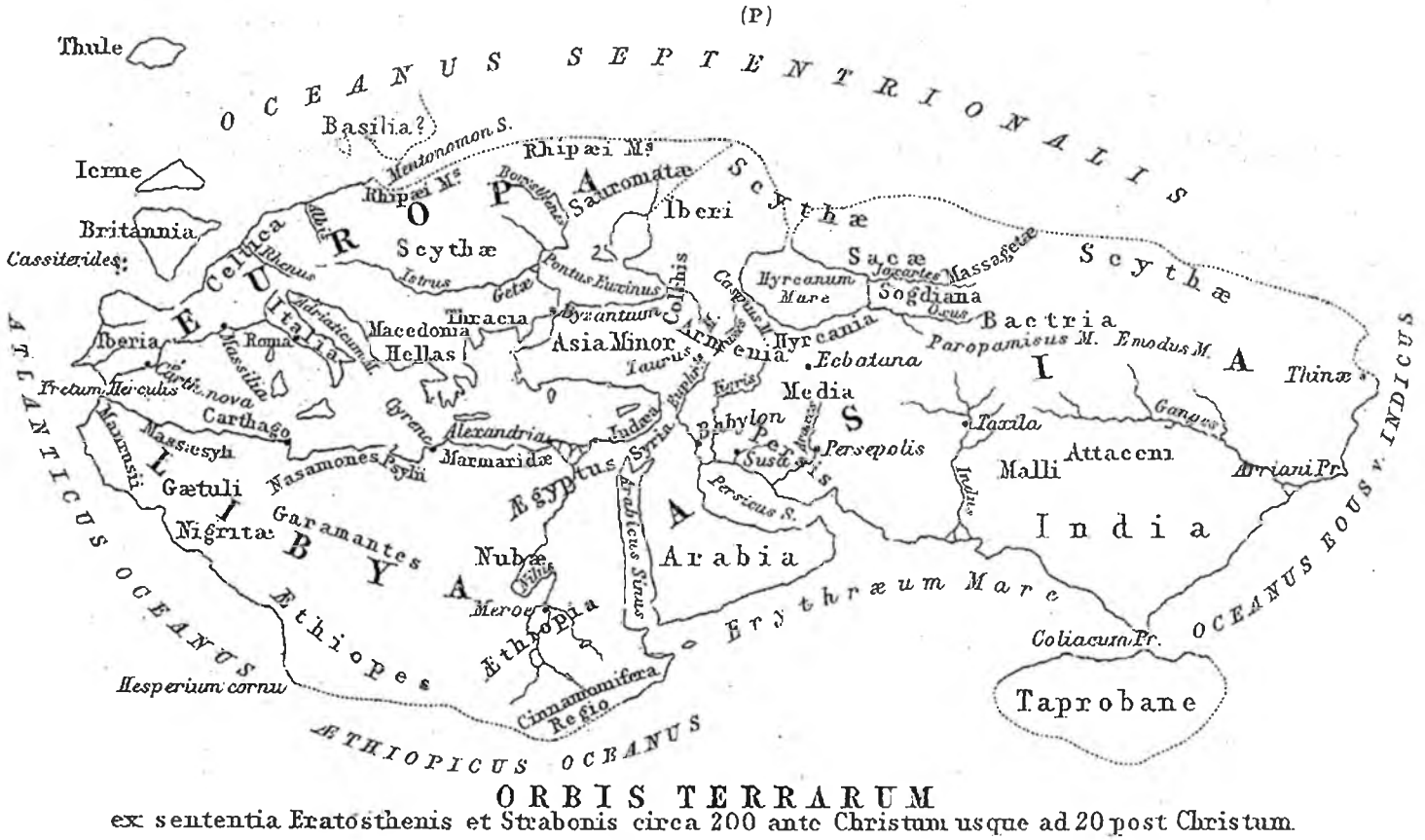

ORBIS TERRARUM

ex sententia Eratosthenis et Strabonis circa 200 ante Christum usque ad 20 post Christum.

MAP1 The world according to Strabo and Eratosthenes (section of map 4, from Ginn and Company's Classical Atlas, Boston, 1894; map attributed to W. and A.K. Johnston)

INTRODUCTION

Identity and the environment in the classical and medieval worlds

Rebecca Futo Kennedy and Molly Jones-Lewis

Identity and the environment

Speculation about human difference and unity is evident in some of the earliest written sources in the Mediterranean. Interestingly, the Greek sources of this period, unlike those that come to us in the Hebrew Bible, posit no single creator for all of mankind, but allow for varieties of creations and births. When a single "race" of humans is created, as in Hesiod, the "races" of mankind were generations of people, born (or created by gods) and then destroyed. The "races," however, were not the origins of distinctive groups of humans, and most peoples with whom the Greeks (and, later, the Romans) came into contact were incorporated within this single human race through mythical genealogies. And yet, the ancients observed that humanity was itself divided into groups with distinctive physical features, languages, and customs.

Many theories arose to account for how these differences had come into being and what they meant for a group's identity. Earliest Greek thought posited that peoples at the edges of the world were, in fact, not humans but monsters; this notion survived well into the early modern period. The scientific awakening of the Greeks and development of medicine in the Hippocratic tradition, however, gave rise to theories of geographic and climatic determinism that went beyond the process of placing monsters and wonders in the geographic extremes. Philosophers and early ethnographers addressed observable human difference with speculative theories of biological or hereditary determinism. Some ancient peoples even developed theories of separate human origins for themselves; they claimed to be autochthonous, born from their own land and not by evolution from the humans created by Deucalion and Pyrrha. Theories based on the mixing of peoples from these autochthonous origins through mythic conquests accounted for both human differences and similarities, and theories of colonization and migration abounded. But it was not always clear to the ancients (or to us now) what counted as a distinguishing characteristic: Were peoples to be distinguished by physical features, by language, by religious practices, by choice of government, or by funeral rights, etc.? Were these practices a result of *phusis* or *nomos*?

The multifarious theories the ancients developed which wended their way to the modern world through medieval and early modern audiences were not always distinct, nor did they develop chronologically, one theory building upon another. Rather, the theories often competed with each other, sometimes within a single text. As the Greeks and Romans expanded their

explorations and conquests into northern Europe, Asia, Africa and beyond the Pillars, they found themselves confronted with increased differences. At the same time, the "monsters" that had once been thought to inhabit the edges of the world came into focus as real peoples, with their own cultures and physical characteristics. As exploration and map making developed further in the late antique and medieval worlds, these monsters remained and retained much of their ancient function, as they were used to explain and categorize human differences on the periphery. Old theories were adjusted and new ones evolved.[1] Consistently, however, the Greeks and Romans and their intellectual heirs in the medieval world viewed environment—land, climate, geography, and man-made—as a key factor in defining identity. In some regions, the Greek and Roman blended with Christian, Jewish, and Arab traditions to give new life to the ancient ideas within environments the Greeks and Romans themselves would have considered foreign. Even as history moved beyond the "golden ages" of Greece and Rome, what was considered the world's center and, therefore, the ideal environment to produce ideal peoples shifted away from the Mediterranean to other regions of the world—every culture inevitably becoming its own center with different peripheries. And yet, the ancient environmental theories continued to be used and adapted, or, in cases such as ancient China, seem to have developed concurrently with the Greek and Roman ideas.

Environmental determinism and this volume

The idea for this volume emerged from years of considering why it was that all ethnographic texts seemed to include not just descriptions of peoples, but of the land, plants, and animals as well. It also emerged from the reading of early scientific texts in classical and Hellenistic Greece that tried to rationalize mythological tales of heredity and descent along with the visible differences of humanity as the known world expanded. Some of this rationalization was done under the sway of colonization, imperial expansion, and foreign invasions. These processes inform and skew the perceptions of others in a way that is inextricably bound to understanding them as part of a foreign location or "otherspace." In this volume, we have focused on the theories of identity and ethnicity that took their cues from developments in natural philosophy and ethnographical passages in these historians, who tried to explain foreign peoples through understanding of foreign space.

Among the intellectuals of the ancient world, a growing preference for physical and rational explanations for the nature of the universe led to a way of viewing human difference that relied on a holistic worldview that connected mankind intimately with his physical environment. This gave rise to an idea we have decided to call "environmental determinism"—the ancients themselves had no term for the theory—that is, the notion that a people's appearance, habits, customs, and health all stem from the land in which that people originates. This idea pervades ancient texts, but finds its most clear articulation in the Hippocratic treatise *Airs, Waters, and Places*, in which the author considers environment first as a force governing health, and in later chapters as a force shaping ethnic and cultural difference. It has proved a remarkably persistent theory, and variations on it emerged as key elements in the Enlightenment, in the development of evolutionary theory, and continue to be used to the modern day in works such as Jared Diamond's *Guns, Germs, and Steel* to explain economic disparities throughout the globe.

However, environmental determinism had many faces in antiquity, and it adapted as the world changed around it. From the ethnography of the fifth century BCE to the imperialism of the Roman Empire, thinkers found new ways to use this rationalizing idea of environment and identity to support and shape policy, military administration, and even architecture. It was a theory without a name in antiquity, often part of the subtext rather than the text of any given

work grappling with the thorny issues of identity and human difference. It is this subtext of an understanding of the physical body that is intimately dependent on environmental factors that unites the papers in this volume; it is also the many ways in which such connections can be drawn that gives the volume its variety of foci and voices. This deceptively simple idea—that human bodies are shaped by their environment—was able to change as the times and cultural context changed from the ancient world to the medieval and onward to the modern world.

With this volume we hope to give new direction to the study of identity in antiquity by showcasing environmental theories of ethnicity in their larger cultural and historical contexts. Identities for the ancients were, as Joseph Skinner has recently argued, more akin to interactive processes than stable entities.[2] Conceptualizing identity through environments was a way to recognize the changeable nature of identity, as identities shifted based, literally, on the weather; at the core of environmental theory seems to be the idea that the land had humors just as the body and the balance of these environmental humors impacted the various inhabitants—plant and animal alike. And yet, the ancients also struggled to situate this environmental conception of identity with the realities of migration, colonization, and cultural adaptation. While the theory of environmental determinism is remarkably stable over the course of the roughly two thousand years covered in this volume, it is only so on a theoretical plane and it sits in constant conflict with ideas of identity more strongly rooted in observation of and engagement with others. How active it was as a mental process in everyday interactions between people is an unknown. The complex and pervasive networks of interactions between the various peoples of the ancient Mediterranean allowed for a great deal of real experiences with foreignness.[3] As with most theories, reality is frequently a rather different kettle of fish; theories of environmental determinism are no exception.

In addition to opening a new avenue in the exploration of identity, this volume also adds a differing perspective to a growing body of scholarship on environment in antiquity, scholarship that is increasingly viewing environment within the term of modern environmentalism, focusing on ecology and climatology as something stable and subject to human exploitation.[4] While there has been a type of revival of the sort of geographic determinism found among the ancients in modern environmental theory and a renewed interest in medical climatology especially,[5] the definition of environment itself has not been questioned and discussed by modern thinkers to the extent that it was by the ancients. These essays all, in one way or another, explore the various meanings environment had in antiquity and how the Greeks and Romans bound up their identity to it. The essays will also explore the way these theories from the classical tradition went on to shape medieval thought. Finally, this exploration of the history of environmental theory raises issues that modern thinkers can use to refine and understand the current state of the field.

Organization

We have divided the papers into three general categories, and then arranged them in a roughly chronological order. The arrangement is a convenience only as the chapters interact with each other beyond these general clusters and we recommend that readers consider the volume as a totality, and not as distinctively grouped sections. Part I, "Ethnic Identity and the Body," establishes the theoretical landscape on which the volume rests, including a range of ideas centered on the connection between land and human bodies, and the ways those ideas were adapted to fit new times and contexts. This section also serves to give context to the chapters that follow.

In Part II, "Determined and Determining Ethnicity," the focus is on specific cases and how they contribute to our understanding of how rationalizing ideas about human difference

functioned in various genres and practices. Environmental theories did much to shape how people prepared, marketed, and bought medicines, just as they also affected the ways in which cities were designed, military bases were run, and new populations were integrated into existing communities. The chapters in this section showcase the diversity of ways that environmental theory made its presence felt among ancient and medieval communities, and also the varied ways in which ancient thinkers reacted to moments of cognitive dissonance between environmental theory and observed reality.

Part III, "Mapping Ethnicity," looks to the ways in which ethnic theory influenced ancient societies' "big picture" of the world and its peoples, a picture that shifts as the known world expands and populations move and diversify. Included in this section is a chapter on a similar theory of identity and its application in China, showing how environmental logic was being used to justify policies and structures in lands far from the world shaped by Greece and Rome.

One note: there is no single chapter dedicated to Herodotus. Instead, he appears in almost every chapter addressing classical texts—an unplanned, but surely symbolic occurrence. Without Herodotus, there is no volume. The "Father of History" may also be the father of environmental identities.[6]

Rationalizing models of human difference had an impact both deep and wide on the ways in which people and peoples processed their interactions with the larger world around them. Such models were used both to justify and to question empire and exploration, and informed the choices people made when buying and selling, building and traveling, and writing and organizing the world. Viewing texts that deal with identity through the rationalizing lens of environmental theories allows us to step away from overly simple generalizations about "Greeks," "Romans," and "Barbarians," and also to avoid projecting modern language of race and ethnicity onto cultures that were working on different models. In this collection, we showcase the possibilities that come from integrating ancient theory with ancient practice in a way that engages the ancient and medieval intellectual landscapes on their various registers.

Notes

1 See, for example, Grafton 1995.
2 Skinner 2012.
3 Some attempts at engaging with this intercultural process include the essays in Gruen 2011 (historical and art historical), essays in Malkin *et al.* 2009 (primarily historical), and essays in Rowlands *et al.* 1987 (primarily archaeological).
4 For example, Salmon and Shipley 2011, Thommen 2012, Jeskin 1998, Hughes 1993, and Harris 2013.
5 See Bashford and Tracy 2012 for an overview of Hippocratic environmental determinism in modern medical discourses. See also Presti 2012. This theory was especially popular in the late nineteenth and early twentieth centuries among doctors and early anthropologists. See Kennedy forthcoming for discussion. On the reemergence of environmental determinism in debates on evolution and in the field of geography, see Livingstone 2012 and 2011.
6 The date of the Hippocratic *Airs, Waters, Places* may be slightly earlier than Herodotus, but it is uncertain. Most scholars date it to after 425 BCE.

Bibliography

Bashford, Alison and Sarah Tracy. 2012. "Introduction: Modern Airs, Waters, and Places." *Bulletin of the History of Medicine* 86: 495–514.
Grafton, Anthony. 1995. *New Worlds, Ancient Texts*. Cambridge, MA: Belknap Press.
Gruen, Erich S., ed. 2011. *Cultural Identity in The Ancient Mediterranean*. Los Angeles, CA: Getty Research Institute.

Harris, William V. 2013. *The Ancient Mediterranean Environment between Science and History*. Leiden: Brill.

Hughes, J. Donald. 1994. *Pan's Travail: Environmental Problems of the Ancient Greeks and Romans*. Baltimore, MA: Johns Hopkins University Press.

Jeskins, Patricia. 1998. *The Environment and the Classical World*. London: Bristol Classical Press.

Kennedy Rebecca. Forthcoming. "Otis Mason and Hippocratic Environmental Theory at the Smithsonian Institution in the Nineteenth and Early Twentieth Centuries." In *Classics and Early Anthropology*, edited by Emily Varto. Leiden: Brill.

Livingstone, David. 2012. "Changing Climate, Human Evolution, and the Revival of Environmental Determinism." *Bulletin of the History of Medicine* 86: 564–95.

———. 2011. "Environmental Determinism." In *The Sage Handbook of Geographical Knowledge*, edited by J. Agnew and D. Livingstone. London: Sage Publications Ltd.

Malkin, Irad, Christy Constantakopoulou and Katerina Pangopoulou, eds. 2009. *Greek and Roman Networks in the Mediterranean*. London: Routledge.

Rowlands, Michael, Mogens Larsen and Kristian Kristiansen, eds. 1987. *Centre and Periphery in the Ancient World*. Cambridge: Cambridge University Press.

Salmon, John. 2011. *Human Landscapes in Classical Antiquity Environment and Culture*. London: Routledge.

Skinner, Joseph. 2012. *The Invention of Greek Ethnography*. Oxford: Oxford University Press.

Thommen, Lukas. 2012. *An Environmental History of Ancient Greece and Rome*. Cambridge: Cambridge University Press.

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PART I

Ethnic identity and the body

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1

AIRS, WATERS, METALS, EARTH

People and environment in Archaic and classical Greek thought

Rebecca Futo Kennedy

Introduction

> "Do it, if you want. But be prepared to rule no longer but be ruled instead. For soft men tend to come from soft lands. It's not common for marvelous fruits and men courageous in war to grow from the same earth." The Persians agreed, defeated by Cyrus' logic, and decided to return home. They thus chose to dwell in a poor land and rule rather than sow rich soil and be slaves to others. (Hdt. 9.122)[1]

The notion that soft men come from soft lands seems to have been an *idée reçue* for Herodotus and has remained so in the myths of the American West, Orientalist constructions of the East, and *Blut und Boden* ideologies. It rests on the notion that there is a deep and abiding connection between humans and their land. In relationship to their land, a people were thought to have developed their character and culture. More than just character and custom, the land also affected physiques. The softness of the Persians inheres not only in their temperament but in their bodies as well. Herodotus suggests this physical softness when discussing how the environment, in this case the climate, affects Egyptian and Persians skulls (Hdt. 3.12.2–4):

> They say that the cause of this phenomenon is as follows (and they persuaded me easily): The Egyptians, right from childhood, shave their heads and the bone is thickened in the sun. This is the same reason why they do not become bald—Egyptians have the fewest number of bald men out of all mankind. This, then, is why Egyptian men have strong heads. The Persians have weak heads because they wear felt hats from birth to shelter themselves from the sun.

Persian skulls are weak and soft, while Egyptian skulls are hard and strong (and haired). For Herodotus, customs developed among the Egyptians that used the harsh sunlight to strengthen their skulls, while the Persians had a custom of wearing hats to protect themselves from their climate—environment determines bodies and determines customs. Which comes first, custom or nature (*nomos* or *phusis*), is a hen-and-egg question, but clearly environment and

culture intersect to create identifying ethnic characteristics—skull density is an ethnic trait as all Egyptians have strong skulls, while all Persians have weak ones.[2]

In this chapter, I explore three interrelated ways the Archaic and classical Greeks conceptualized the relationship between environment and ethnicity: myths of metals, autochthony, and environmental determinism. I argue that these approaches to the relationship binding human and land attempt to rationalize human difference in a way that privileges indigenous status and encompasses ideas of hereditary superiority. This rationalization might be considered a type of 'proto-social Darwinism,' an organization of human diversity that ranks peoples on a scale from superior to inferior based on a normative standard of purity. This scale derives either from environmental metaphors or is in direct relationship to the environment itself. For my purposes, I am limiting 'environment' to earth and its elements, its climate, topography, and geography. I will not consider built environments except in so far as they are intended to emphasize natural environments.[3]

In what follows, I provide a series of case studies that explore different ways Archaic and classical Greeks conceptualized human diversity in relation to environment, in particular, the land. These may not cohere into a single over-arching theory, but are nonetheless related. Each approach tries to reconcile the visibility of human difference, both physical and cultural, with the fact that humans are a single species who can, if they desire, sexually reproduce. The reconciliation works by organizing peoples into hierarchies based on purported inherent qualities, qualities that are derived from their locations of origin. These ideas offered a response to anxieties that may have affected the Greeks when faced with a world with frequent migrations. Kaplan shows that the Greeks may have assuaged this anxiety with migratory myths and traditions that posit horizontal kinship relationships between different sets of Greeks (as well as Phoenicians, Egyptians, and Persians) throughout the Mediterranean.[4] The environmental theories, on the other hand, offered an explanation for why these peoples should be differentiated and further justified antagonistic political realities even amongst the Greeks themselves. Kaplan's "discourses of displacement" may have been more common in the mythscape for some Greeks, but discourses tying people to specific lands still operated and often existed side by side with migratory origin stories.

It is difficult to discuss identity without addressing the translation of the Greek terminology, in particular *genos* and *ethnos*, which are typically translated as 'race' and 'ethnicity' respectively.[5] While the term 'race' frequently translates *genos*, this should not confuse us into thinking that it carries the baggage of the modern construct of scientific race as it appears in government census data and other official quarters, especially in the United States. The ancient Greeks did not have a concept of a 'white' or 'black' race, nor of 'red' or 'yellow' races.[6] This does not mean, however, that they did not have some concept for groups of peoples defined through shared biological descent that can be approximated with non-scientific 'race.' The term *genos* is frequently used by the ancient sources in contexts of birth and descent. A *genos* is often linked by biology and genealogy, thus 'race' is not an inappropriate translation, even if it inadvertently assumes some modern baggage.

The connection between *genos* and kinship that we see in the texts discussed in this chapter might lead one to assume that *ethnos* is used when identity is defined through political and/or cultural associations and is therefore understood as a subset of *genos*. This is sometimes the case, but it is also clear that *ethnos* is used as well in the ancient sources to denote peoples linked biologically or through kinship. Both *genos* and *ethnos* can refer to groups defined by distant kinship even if *ethnos* in the texts discussed in this chapter is also suggestive of shared culture or political structures. An *ethnos* is usually a group of people who share a government—among Greeks, the *polis* of one's origin is frequently an *ethnos*, while Hellene

is sometimes a *genos*, sometimes an *ethnos*, and Ionian can be a *genos*, an *ethnos*, or *phulē*.[7] Thus, the 'ethnic' for a metic in Athens was typically something like "of Byzantium" or "of Miletus", while their *genos* was likely Hellene, if they lived in a period when 'Hellene' was recognized as a universal category for those living in the Greek world, who shared certain cultural characteristics and descent. If one were a Hellene and not an Egyptian, Phoenician, or Persian, for example, their *phulē* would have, perhaps, been Ionian or Dorian. Despite this lack of consistency, I have elected to translate the term *ethnos* with 'people' (as a collective singular), a usage that includes under its umbrella cultural, political, and kinship associations. For clarity's sake, however, I will include the Greek terms when they appear in each text for categories like race, ethnicity, tribe, or other similar affiliations.

What of the prejudices associated with modern categories of race and ethnicity? If there are no 'race' or ethnicity' as we understand them in modern terms, is there racism or ethnocentrism? Here things are even more difficult to sort because there is evidence from antiquity of stereotypes and prejudices against groups based on kinship, physical appearance, perceived inherent character, gender, language (including accents), and social or economic class, almost all of which groups can be defined using the terms *genos* or *ethnos*. Thus, the prejudices associated with the terms *genos* and *ethnos* in antiquity are not limited to modern racism or ethnocentrism. The type of hierarchization I am arguing for in this chapter, however, might fall clearly under the terms 'racism' or 'ethnocentrism' today.[8] Some of the responses to and manifestations of these prejudices could even be called 'racialist,' as with the 451 BCE Citizenship Law of Perikles in Athens.[9] But my argument is not that the relationship posited by these texts between identity and environment are racist, racialist, or ethnocentric in the modern senses of the words, and one may ask why we even need to find a modern practice that corresponds exactly to ancient types of discrimination. The Greek texts offer a variety of ways for their audience to imagine, construct, and define their own identity and the identity of others based on different associations with place and space, some of which appear analogous to racism and ethnocentrism. They are not the same as our modern pseudo-scientific model of racism, but inherent in these ways of imagining *are* value judgments that classify people as superior or inferior, as part of in or out groups, in ways that could not easily be altered simply by moving to another climate or geographic location, environment at conception and birth mattered most.[10] These value judgments are at first attached to consecutive *genē* of humans (as in Hesiod's myth of metals), but soon are used to subdivide humanity just as the *oikoumenē* itself was divided. This division and the value judgments inherent in them begins with Hesiod, who presents us with an example of the notion of 'purity,' and who hints at a concept of anti-miscegenation that I think is one underlying current in the construction of ethnic identities in ancient Greece.

Hesiod's metal men

Where did human beings come from? The Greeks told a number of different stories, some of which they derived from their eastern neighbors.[11] In Hesiod's *Works and Days* (*Op.* 109–201),[12] the earliest of our Greek authors to speculate on the origins of people, humans are made by the Olympian gods (*athanatoi poiēsan*), presumably from earth and other natural elements. In fact, there are five attempts at creating humans, the first four of which end in mass extinctions. It has been long understood that the metallic associations of the five 'races' of mortal men (*genē*) reflects a valuation of the qualities of the humans made from them not only in life but also in death. One aspect of this valuation, however, has been overlooked, and that is the purity of the metals and its significance. While the first two *genē* are pure metals, the other three races are

impure—they are either represented by alloys, are metals that require extensive refining and purification, or are products of miscegenation between two different *genē*. The status of pure or impure is reflected not only in their names, but in the way their lives and after-lives are represented. Purity equates with luxury, ease, and honors after death, while impurity equates with hard labor, lack, and no clear honor in death.

According to Hesiod, there are five *genē*: gold (*chruseon*), silver (*argureon*), bronze (*chalkeon*), "godlike race of hero-men" (*andrōn hērōōn theion genos*, 159) also called the "half-gods" (*hemitheioi*, 160), and iron (*sidēreon*). The first two *genē* are marked by 'pure' metals, noble metals that can be easily extracted from ores and do not oxidize.[13] The hallmark of these groups is the ease of their lives—the land yielded up its fruits spontaneously (*automatē*) and ungrudgingly for the golden *genos*, and gave them a life free of sorrow and pain, just as the gods had (*hōste theōn*),[14] while the silver spent the bulk of its life in childishness, tended by their mothers (we have no idea who they are). Further, in death, both were marked as blessed and granted honors. The golden was honored as "pure mortal spirits" (*daimones hagnoi epichthonioi*) and warders off of evil: "who watch over judgments and wicked deeds while clad in a mist, roaming everywhere upon the earth, granters of wealth" (Hes. *Op.* 122–6). The silver, while "by far worse" (*polu cheiroteron*) than the golden, "are called blessed mortals under the earth (*hupochthonioi makares thnētoi*)—in second place, but similar honor accompanies them" (141–2).

The next two races characterized by metals—the bronze and iron—live lives of violence and need. The bronze *genos* (145–55), made from ash trees (*ek melian*), is enamored of violence (*hubris*) and is characterized by its brute strength (*megalē biē*) and hardness of heart (*adamantos kraterophrona thumon*); it kills itself off (151–5). Their association with bronze emphasizes their love of weapons and warfare—Hesiod tells us that their weapons and armor are all made of bronze. Bronze also was not a 'pure' metal, but an alloy made by mixing different, weaker metals (copper and tin, primarily). If the metal signifies their inherent character, in this third generation, the metal also suggests an impurity or even degeneration of the *genos*.

The degeneration of the *genē* continues with the iron *genos*, another 'impure' metal that needs to be worked and refined—in order to be useable (174–201). This race, the one to which Hesiod himself is loath to belong (174–5), is defined by its lack—lack of ease (176–8), lack of respect and reverence (182–8), lack of honor or sense of justice (189–96). This lack highlights what makes each of the races distinct, what defines them, and what their valuation means. Better men live in ease and comfort, closer to the gods than not. Better men revere the gods, uphold oaths, are bigger, better, and stronger than others. Even in their childishness and love of violence, the silver and bronze races still were closer to the gods than the iron men. The earth gave up its bounty for them without suffering and toil, even if, as with the bronze race, the men did not eat grain (151). The iron men, however, must labor for their harvest, just as iron itself must endure a smelting process to remove its impurities; the hard work it takes to achieve useable iron characterizes the lives of the iron men.[15]

Into this metallic hierarchy is inserted a fourth *genos* that is not characterized by a metal. These people, the *hemitheioi*, are hybrids born from the gods mating, it seems, with the *genos* of women descended from Pandora. This race, according to Hesiod here, while blessed in many ways, was destroyed in war, although Zeus whisked some away to the isles of the blessed "at the edges of the earth" (*es peirata gaiēs*, 168). Although Hesiod does not say in *Works and Days*, the *hemitheoi* are the result of procreation between gods and humans as opposed to the other *genē* who are made by the gods from earth or trees.[16] This brings up two points of concern. First, they are not given a metal designation, but stand alone outside

of this earth-linked discourse—they are not "born of the earth" and so are not designated by an earthly metal. Second, they are a product of the miscegenation of two *genē*, the *genos* of the gods and the *genos* of women, the descendants of the earth-made Pandora, as is discussed further below. In what is likely a part of the Hesiodic *Eoiae*, it is Zeus himself who intends to destroy this particular *genos* of mortal men even as he fathered many of them (Berlin Papyrus 10560; Most Fr. 155, West Fr. 204; trans. Most):

> δὴ γὰρ τότε μήδετο θέσκελα ἔργα
> Ζεὺς ὑψιβρεμέτης, μεῖξαι κατ᾽ ἀπείρονα γαῖαν
> τυρβάξας, ἤδη δὲ γένος μερόπων ἀνθρώπων
> πολλὸν ἀϊστῶσαι ϲπεῦδε, πρ[ό]φασιν μὲν ὀλέσθαι
> ψυχὰς ἡμιθέω[ν ....]ϱιϲι βροτοῖσι (100)
> τέϙνα θεῶν μι[. . .].[..]ϱ.[ὀφ]θαλμοῖσιν ὁρῶντα,
> ἀλλ᾽ ϙῖ μ[ὲ]ν μάκ[α]ρεϲ ϰ[.....]ν ὡϲ τὸ πάρος περ
> χωρὶς ἀπ᾽ ἀν[θ]ρώπων[βίοτον κα]ὶ ἤθε᾽ ἔχωσιν
> τῶ[ι θ]ῇ[κ᾽] {ε} ἀθα]νάτω[ν τε ἰδὲ] θνητῶν ἀνθρώπων
> ἀργαλέον πόλεμον·[17]
>
> For high-thundering Zeus was devising wondrous deeds then, to stir up trouble on the boundless earth; for he was already eager to annihilate most of the race of speech-endowed human beings, a pretext to destroy [100] the lives of the semi-gods, [ ] to mortal children of the gods [ ] seeing with eyes, but that the ones blessed [ ] as before apart from human beings should have [life and] habitations. Hence [he established] for immortals and for mortal human beings difficult warfare.

The key element of the above fragment is that this race was destroyed because it was godly, but not godly enough (something we should keep in mind when thinking about discriminatory laws). It was miscegenation with the gods that Zeus sought to end, miscegenation that created a lesser people. Here, as with the use of bronze and iron metals, there is a hint of impurity about this *genos* that, perhaps, explains why they are destroyed—as inferiors to the gods through miscegenation with humans, they are not worthy of the honors of the purer *genē* of gold and silver, even though some are granted an afterlife beyond the boundaries of the earth. It also establishes the principle that miscegenation between *genē* is bad and produces inferior, impure, peoples. A similar dynamic appears, as we shall see, in discussions of the various peoples born from Pandora's descendants and after the great flood. There we see numerous autochthonous groups emerge, some then "mixing" with others, some seeming not to have.

Born from the earth[18]

Although it is not explicitly stated, except with the bronze *genos* made from ash trees, it can be assumed that the other metal *genē* were made or 'born from the earth' (*gēgenesis* or autochthony) through the agency of Zeus and the other gods.[19] This idea that peoples emerge from or are made from the land that they then inhabit has a long tradition, starting with Hesiod's Pandora (*Th.* 570–93; *Op.* 60–105) and continuing throughout the classical period. In the section that follows, I argue that this distinction as a type of 'earth-born' people can be used to emphasizes a hierarchy rooted in a notion that the land in which one is born was thought to imbue the peoples there with specific innate characteristics, just as the metal that designated the metal *genē* was a mark of their inherent value and *genos*-purity. These innate characteristics,

I suggest, were thought to be suited to and shaped by specific landscapes and were not transferable to another space. Furthermore, to be 'mixed' was to be impure and so inferior, which meant restricting interactions between those not born of that land and the indigenous. Or, it risked a deterioration of the innate character and integrity of a people (deterioration such as could occur with iron through oxidation). There is also an element of manufacture—the less-labored, earth-born are superior (as with the gold, silver, and bronze races), while the more wrought or labored are inferior (as with the iron race and the *hemitheoi*); peoples who use *technē* to alter or combat nature are inferior to those whom nature properly endows. In these approaches, we see the conceptualization of identity through the relationship to environment as forming hierarchies among different peoples based upon not only the earthly elements from which they emerge or are made, but the geographic space whence they came.

Part of the process of creating hierarchies resides in the double meaning of autochthony in our classical Greek sources. It can mean both 'born of the earth,' arguably its secondary meaning, or 'always having the same land,' i.e., indigenous.[20] As Rosivach has discussed at length, the earliest meaning of the term *autochthon* is most likely the latter and the term only acquired its connection to being born from the earth (*gēgenesis* in other sources) in the peculiar Athenian context where the earth-born early king Erichthonios (or sometimes Erechtheus) becomes the progenitor of all Athenians, who also lay claim to being the earliest and only true inhabitants of their land. Thus is born the notion of Athenian exceptionalism that they used frequently to set themselves above not only non-Greeks, but other Greeks as well, in ways that other 'born of the earth' peoples did not. I begin with pre-Athenian representations of *gēgenesis* and then discuss within this thought-scape the particular instance of Athenian indigenous status, one of the most prominent identities formed through connection with environment from the Greek world.

Hesiod's Pandora and her descendants

The *genos* of woman, according to Hesiod in *Theogony,* is "molded from earth" (*gaiēs gar sumplasse*, *Th.* 571), "wrought as an evil for men" (*teuksen kakon anthropoisi*, Th. 570). She is not named Pandora here, but is dressed up with all the gifts of the gods, including silvery garments, a veil, garlands of flowers, and a golden crown decorated with terrible wild creatures (*knōdala deina*) nourished by land (*ēpeiros*) and sea (*thalassa*) (*Th.* 582). As Loraux points out, the creation of woman is in addition to man and with her comes the need for sexual reproduction—*gēgenesis* of humanity generally stops with the generation of woman.[21] In *Works and Days*, Pandora's creation from the earth is also recounted. In this instance, Zeus orders Hephaistos to "mix earth and water" (*gaian hudei phurein*, 61) from which to make a "beautiful form of a maiden" (*partheikēs kalon eidos*, 64). Hephaistos obliges and "molds from the earth (*ek gaiēs plasse*) a likeness to a tender maiden" (70–71). In both accounts, the *genos* of women is an evil (*kakos*) or a trick (*dolos*) for men. This *genos* is a calamity (*pēma*), something denoted in *Works and Days* more explicitly because the earth itself is "mixed." *Phurein*, although frequently treated as a neutral term in translations, is not. *Phurein* means to defile something, to pollute the earth with the water, to confuse or confound.[22] Like the bronze and iron races of men who were generated before, woman is impure and a product of *technē*, and, as such, is an inferior *genos,* an inferior *genos* that taints even the gods, producing the *hemitheoi*. From the time of Pandora, the risk of impurity lingers for all peoples who must reproduce sexually. The symbolism of Pandora's *pithos* as a womb has often been noted—to open it is to release evils upon the world.[23]

It is important to note that for Hesiod and other Greeks, women were imagined as a separate *genos*, a "race apart." There are "tribes of women" (*phula*) who make up the *genos* (Th. 591),[24]

phula whom Hesiod described at some length in his *Catalogue of Women* (*Ehoiae*). These tribes include Greek heroes born from the affairs of gods and the *genos* of women, presumably the men of the fourth, 'heroic' race. These peoples also seem to include such foreign *ethnoi* as the Scythians, Ethiopians, Pygmies, and Makrokephaloi, all peoples who lived on the edges of the world and who differed markedly in the appearances and cultures from the Greeks.[25] In this tradition, then, whether for good or ill, human variation derives from the 'mixed' earth-made *genos* of women. And yet, the descendants of woman cannot account for all peoples of the world nor did all Greeks admit descent from the evil gift of Zeus to man. Instead, there are numerous stories of other generations of earth-born peoples, generations that had no connection to Pandora and her kind.

After the flood

After Zeus depopulated much of the earth with a great flood, one group of people was regenerated by Deucalion and Pyrrha. This pair were told to toss stones onto the earth and these stones became humans. According to Pindar, it happened at the village of Opus (*Olymp*. 9.40–46): "Deucalion and Pyrrha, by the decree of lightning wielding Zeus, descended from Parnassus and first established their home. There they asexually (*ater eunas*) created a unified people (*homodamos*), made from stone, a people [*laos*] named from the stone (*laas*)." Pindar's *laoi* are a unified, autochthonous people who are worthy to open his song. Their status as earth-born descendants of the legendary Deucalion marks them as both indigenous to their land and the progenitors of great men, such as Epharmostus, the victor celebrated in the ode. From the *laas*-born peoples came "your bronze-shielded ancestors from the beginning" (54–5) who were "always indigenous/true-born (*egchorōioi*) kings" (57). This strand of indigenous people was 'improved,' as Pindar tells us, when Zeus decided to infuse their stock with his own seed and transport the daughter of Opus to Locrus, which then opened its gates to "foreigners" (*xenoi*). Locrus becomes a haven for immigrants and foreigners and is derived from a mixed people, while Opus retains its pure, autochthonous status—and it is from there that the victor derives his ancestry, not from Locrus.

Although Pindar emphasizes the indigenous nature of the *laas*-born and the presumably superior status this connection confers, Hesiod, quoted by Strabo, links these stone-born men to the Leleges and calls them a "mixed people" (*migadas*), because Leleges derives from *legein*, "picked." Furthermore, it is their mixed status that Strabo suggests was the cause of their extinction; "on account of this [being mixed] the *genos* died off (*ekleloipenai*)" (Strabo *Geo.* 7.7.2).[26] But the tension between their 'native' and 'mixed' statuses suggest that lines of descent linking a people back to autochthons somehow confers a superior status on them over other men, while being mixed is considered weakness. The most well-known example of this dynamic comes from Athens.

Athenian indigenous status and autochthony

Athenian autochthony is the most well known and discussed version of the earth-born myths. Athenian myths, however, must be contextualized within historical rationalizations or discourses on indigenousness. The myth of Athenian autochthony, found fully developed and embedded in civic discourse from the Peloponnesian War on,[27] sanctioned views of Athenian exceptionalism and ethnic distinctiveness; other Greeks were descended from an Athenian and a foreigner (as in Euripides' *Ion*), whereas Athenians themselves came from the very soil of Attica and the gods (e.g. Pl. *Crit.* 109d) and were the only Greeks to have always

inhabited their land (e.g. Isoc. *Pan.* 4.24–5). Even if Gruen is correct to say that "autochthony was hardly the prevailing notion," or that "[a]utochthony did not have much purchase in Hellas as a marker of identity," it mattered to the Athenians in their definition of citizenship and 'purity.'[28]

The Athenians laws imply that they believed their autochthony meant that they were a 'pure' people. Such a view was, of course, contradicted in reality and in many of their other traditions. Nonetheless, autochthonous purity remained powerful on an ideological level.[29] Susan Lape refers to the type of citizenship that evolved in Athens in the classical period as "racial citizenship," a term meant to capture the focus on a purity of descent that the autochthony myths conjured up.[30] The Athenians need not have believed the comic story of Hephaistos' attempt at wooing Athena to believe they were an exclusive and privileged people. Legislation intended to enforce this vision acted to limit citizens in Athens to those born of two citizen parents.[31] This type of legislation rests on the idea that Athenian blood was superior to non-Athenian and that mixing of Athenian blood would weaken the city.[32] Furthermore, foreigners and those who had mixed with foreigners were considered less loyal or even incapable of loyalty to the city. They could hardly be good citizens.[33] The underlying logic rested in part on the view that autochthony tied every Athenian to the land,[34] and the myth's greatest development coincided with the expansion of the citizen population of Athens to include non-land-owning Athenians. Their link to the land was mythical, ideological, and perpetual, not material and limited to those who owned land. Autochthony filled the gap between citizens and their land.[35]

Herodotus discusses Athenian indigenous status as part of his tale of Croesus, who decided, in his power struggle with Cyrus, to befriend the most powerful Greeks (1.56.2):

> Doing some research, Croesus discovered that the Athenians and the Lacedaemonians were preeminent among the Greeks. The Lacedaemonians were preeminent among the Dorian *genos*, the Athenians among the Ionian. They were the foremost peoples in antiquity as well—the Athenians among the Pelasgian peoples, the Lacedaemonians among the Hellenic peoples (*ethnoi*). The Pelasgian Athenians had never moved anywhere, but the Hellene Lacedaemonians wandered a great deal.[36]

In this passage, Herodotus acknowledges two things—first, that the Athenians were not originally Hellenes, and second, that they are indigenous (autochthonous). Were the Athenians Pelasgians, then? Herodotus notes later that the Pelasgians he refers to "arrived at some point in the past and merged with the Athenians" (1.57.2).[37] There were, therefore, Athenians in Attica already. Whether they were Hellenes or not, Herodotus does not say. One must assume that they were not Hellenes in the sense that they were descended from Hellen or from other Greeks. Instead, Herodotus tells us that, "if the Pelasgian language was common here and the Attic peoples (*ethnoi*) were once Pelasgian, then it seems clear that they changed their language at the same time as they became Hellenes" (1.57.3). To be a Hellene was cultural for the Athenians, not biological. Herodotus never explains where those Athenians who preceded the appearance of the Pelasgians came from, but they have no fixed language of their own and so take up Pelasgian as their native tongue. The Athenians must have been indigenous—Herodotus offers us here nothing to show otherwise—and twice took on new cultural identities when they adopted new languages. Thus Herodotus acknowledges Athenian claims to autochthony, while culturally situating them as Hellenes. As Rosiland Thomas points out, Herodotus furthers this Pelasgian-to-Hellene narrative later when he recounts that the Pelasgian Athenians were once called Kekropidae (after King Kekrops), but became Athenians with the arrival of Erechtheus.[38]

According to Thucydides, Athens alone of other Greek *poleis* still held its original inhabitants (*anthrōpoi ōikoun hoi autoi aiei*, 1.2.5), but it increased its population in the earliest days through accepting immigrants (*metoikoi*) into the citizen community (1.2.6).[39] This situation, however, did not prevent later Athenians from treating their indigenous and earth-born status as a type of purity, a purity that they contrasted with "mixed" (*migadas*) peoples (Isoc. *Pan.* 24). Consistent with the logic behind the myths of metals, a "mixed" status is worth less, a fact Theseus reminds Adrastus of in Euripides' *Suppliants* (ca. 423 BCE) (Eur. *Suppl*. 219–25):

> You, Adrastus, appear to me to be a fool along with this company. You followed the oracles of Apollo and gave your daughters to foreigners to marry, as if gods, not mortals, decided marriages. But doing so, you have mingled (*summeixas*) your clear line (*lampron*) with a muddy one (*tholerōi*) and sorely wounded your house.

Theseus points here to a concept that was embedded in the Athenian consciousness and that had been codified into law in 451 BCE. That year, at the urging of the politician Perikles, the Athenians passed a law that limited citizenship to those born from both citizen fathers *and* mothers (Pl. *Per*. 37.1–5). Up until this time, only the father had been required to hold citizenship. Although the enforcement of this law went into abeyance during the Peloponnesian War for a variety of reasons,[40] ideologically, the city continued to promote in public images, architecture, and performances the idea of the 'pure' Athenian of indigenous and earth-born descent. To be an Athenian citizen meant to be a part of Attika, and this bond was not something that could be shared by anyone of non-Athenian decent, who would, thereby, not be descended from indigenous stock.[41]

This notion is captured best in the representation and use of the myth of the Erechtheids. As Clements discusses, the landscape of Athens itself was enlisted to tell the tale of its identity.[42] Such a bond between landscape and identity in this myth was further enacted on the tragic stage in two plays by Euripides, the *Erechtheus* and *Ion.* I pass over the *Erechtheus* because only fragments remain and its treatment of the myth is unclear. The *Ion*, however, shows clearly the connection made between landscape and identity, embedding Athenian identity within the soil of Attica itself.

Euripides' Ion

Ion tells the tale of Erechtheus' daughter Creousa, who was, prior to the action of the play, raped by Apollo and impregnated. She had exposed the child upon birth, but Hermes, at the request of Apollo, had secreted the child away to Delphi, where he grew under the name Ion as a temple attendant. As the play begins, Creousa has gone with her husband, the Achaean Xouthous, to Delphi to ask the god about their childlessness. Apollo has planned to send his son by Creousa back to Athens with her to resume his rightful place. Before this can happen, however, Creousa attempts to kill Ion (and he her) before it is revealed to her and Ion that they are mother and son. Tension over Athenian ethnic identity and descent run throughout the play—Creousa worries about her husband's foreignness, Ion is concerned about being accepted in Athens as a foreigner, and Creousa utterly rejects what she sees as a foreign takeover of Athens by Xouthous and Ion (when Ion is mistakenly thought to be the son of Xouthous). The identity of the Athenians—and the royal family in particular—is bound to its place; to be of Attica's soil alone marks one as belonging in Athens.

Scholars disagree whether *Ion* critiques or supports Athenian autochthony.[43] Lape recently argued that "Characters in the play both embody and act out the belief that citizens were

thought to inherit patriotism and special characteristics that qualified them for citizenship."[44] Similar to other scholars' discussion of autochthony, Lape focuses on the ideological implications of descent and purity of descent within the framework of citizenship. What are the implications of the myth for the construction of indigenous status and its relation to the land? What does Attic soil, and by implication the soil of other lands, imbue its people with? It is more than a democratization of aristocratic *eugeneia*; it binds the people to their native soil. *Ion* (and autochthony broadly) is not only about ethnic purity, but about ensuring that people are where they belong. It is about binding a particular people to their environment, even after they leave it, and about privileging those people who 'belong' and are rooted in a place, not necessarily in a line of descent.

This dynamic of privileging indigenous inhabitants over immigrants appears vividly in Euripides' play where Creousa, Ion, Xouthous, and their respective descendants are associated with and disassociated from Athens. When Ion first meets Creousa in the temple of Apollo at Delphi, their exchange establishes the status of Creousa as a descendant of the earth-born Erichthonios. Erichthonios, her grandfather, "sprouted from the earth" (*ek gēs . . . eblasten*, 267) and into the same earth. Erechtheus returned: "Is your father truly covered over by a chasm in the earth," (*chasma . . . kruptei chthonos*, 281). Her family emerged from and will return to the Attic soil. Creousa claims to have gained no good fortune from this miraculous birth of her grandfather (268), although Ion tells her that she has a noble bearing (*gennaiotēs*), which proves her superior birth (*eugenēs*) (236–40). This superiority is linked explicitly to her autochthonous status, a fact revealed in the discussion of Xouthous' identity and his relationship to Athens.

When Ion inquires of Creousa who among the Athenians is her husband, she tells him that he is not a citizen (*astos*), but an "import" (*epaktos*) from another land (291). Ion is puzzled at how a foreigner (*xenos*) could marry a "native" (*eggenēs*) (293). The answer is that Creousa was given, she says, as a "dowry (*phernas*) and spear-prize (*doros labōn geras*)" and she seems none too pleased about it. In fact, she was given to him in return for the help Xouthous gave the Kekropidae in conquering a foreign land (Euboea). Xouthous, regardless of his own high birth (he is the son of Zeus), is not considered by Creousa (or Ion) to have married into Athens. Although she calls him her "well-born husband" (*eugenēs posin*, 392), divine ancestry does not trump place of birth for the indigenous. Even once Ion has been given to believe that he is Xouthous' son, he fears rejection by the Athenians, who are "not an imported race" (*ouk epeisakton genos*, 590). The language of "importing" is contemptuous even when used by Ion of his newly found father, whose status as an import will negatively impact Ion's own status in the city: "I would be attacked having two diseases (*duo nosō*): the foreignness (*eupaktos*) of my father and my own bastard birth (591–2)."[45]

This language of importing juxtaposed with the discourse of autochthony suggests that there is something dangerous and invasive about even the well-intended *xenos*.[46] The fact that Creousa's and Xouthous' subsequent children will all leave Attica to found other Greek tribes, the Dorians and Achaeans (1589–94)—a narrative that aligns with the migratory origin stories of those peoples—suggests that they do not belong in Athens. Of Ion himself, Athena states that he should be returned to Athens, the land of Erichthonios, as it is just (*dikaios*) that he rule over her land (*archein tēs emēs hode chthonos*, 1572–4). He will bear four sons, "four born from a single root" (*miās rhidzēs*) who will give their names to the peoples who dwell in her cliffs (1575–8). The land is Athena's and those who dwell in it must be her children, her chosen ones. The repetition of "my" and "mine" as she speaks of the place that shares her name is emphatic. She will also further lay claim to the land known as Ionia through the grandsons of Ion (1581–8), but they are not imports to these lands; they are simply inhabiting land that rightly belongs to Athena already.[47]

In *Ion*, we see the language of purity, indigenousness, and immigration all juxtaposed, suggesting that at least some Athenians understood themselves as exceptional and superior to other Greeks because they were not migrants, but of the land, perhaps literally. Such a view of themselves was not out of step with other contemporary trends in understanding identity, as seen in the Hippocratic *Airs, Waters, Places*.

Hippocratic environmental determinism

The Hippocratic *Airs, Waters, Places*[48] (*AWP*) is the most explicit presentation of the relationship imagined between identity and environment, though, in some ways, it is the most elusive. It posits multiple ways for humanity and nature to interact, but it begins from the premise that climate and geography shape human physiology and character.[49] Thus, the text explains that peoples who reside in extreme climates and geographic points in the *oikoumenē* have radically different physical appearances from those living in moderate climates with central locations (i.e. mainland Greece). Further, the customs and the character of these peoples are shaped through adaptation to these climates. The author, however, does allow for custom to moderate the impact of climate, especially through the application of technologies to the body.[50] I begin with a short overview of the general theory of environmental determinism in the text, then address two specific tribes: the Scythian Nomads and the Makrokephaloi, a Black Sea people who dwelt near the border of Europe and Asia.

The author of *AWP* early establishes a direct connection between the environment and physique.[51] If a city is situated where it is exposed to hot winds (*ta pneumata ta therma*), the water will be somewhat salty, near the surface, and hot in the summer and cold in the winter (*Aer.* 3.1). People living in such a city would as a result have heads full of phlegm (*phlegmatōdēs*) and their bodies (*ta eidea*) would be rather flabby (*atonotera*) (*Aer.* 3.2). Cities situated exposed to cold winds (*ta psuchra*) would have cold and bitter (*sclēra*) water (*Aer.* 4.2), while the inhabitants' bodies would be vigorous (*entonos*) and lean (*skeliphros*). Further, they are bilious (*cholōdēs*) and their heads hard. Inhabitants of these cities are said to have fiercer (*agriōtera*) instead of milder (*hemerōtera*) characters (*ta ēthea*) (*Aer.* 4.2–3).

Such relationships between the location and climate of a city and the physiology and character of its inhabitants continues with discussion of cities with an east-west orientation, whose people have good complexions (*euchroa*), and better (*beltiōn*) temperaments (*orgē*) and intelligence (*sunesis)*. Further, in the case of east-west orientations, the quality of the people is explicitly understood as of the same quality as "all other things that grow there" (*ta alla ta emphuomena*)—they are all "better" (*ameinō*) (5.4). In this case, as well as in the previous and successive examples provided by the author, the orientation and location of the city is linked explicitly to the quality of the water in the city and thereby directly to the health of the inhabitants.[52] The health of the inhabitants is generally discussed with similar references—fertility, physical hardness or softness, cultural adaptation to the landscape—when the author constructs the ethnic stereotypes in the second half of the treatise (e.g. *Aer.* 15 on the Phasians, 19 on the Scythian Nomads).[53]

At section 12, the author switches to a discussion of how geographic location at the extremes of either Europe or Asia impacts the inhabitants.[54] Asia and Europe differ "in all ways" from each other, a fact that causes the peoples (*ethnē*) in each to also differ remarkably, particularly with regards physical form (*tēs morphēs*). According to the author, the impact of the environment is as follows: a temperate, warm, dry climate with no noticeable seasonal shifts, such as that in Asia Minor, leads to milder (*hēpiōteros*)—a term that frequently itself is used of weather and climate—and more even-tempered (*euorgētoteros*) peoples.

Physically, they will be tall and uniform in build. People in such a climate, however, will also be more subject to slavishness and pleasure seeking (*Aer.* 12). The people's stature correlates with the vegetation ("everything in Asia is by far more beautiful and larger," 12.2). There is a large section of text missing wherein the nature of the waters may have been discussed before the author shifted to Egypt (also missing). Given the discussion of waters earlier in the text, however, we can also likely assume that the waters of this region are sweet and engender the desire for pleasure.[55] Peoples who live where Europe and Asia meet in the north, however, are fundamentally different: because the climate moves between extremes of cold and hot and the topography of the land is varied, the physical appearance and character of the peoples who live in the north varies greatly: "The natures of some of them resemble wooded and well-watered mountains. The natures of others resemble airy, dry lands, or marshy meadows, or bare, dry plains" (13.4).[56] Also, variations in weather and landscape explain why "the physiques of Europeans show more variety than those of Asia and why their stature varies greatly even from city to city" (23.2).

The environment of Asia causes its peoples to be less warlike and more prone to live under a monarchy because the climate never changes (*Aer.* 16); stable climates induce sloth: "Laziness is inherent in a uniform climate. Endurance of body and soul comes from change. Also, cowardice increases both from softness and laziness, while courage increases from endurance and work ethic" (*Aer.* 23.3). The opposite is true of those peoples on the northern border of Europe and Asia, however, who experience regular shocks (*ekplēksies*), which results in "more deterioration in the coagulation of the seed" (*hai gar phthorai pleiones . . . tou gonou en tēi ksumplēksei*) as the weather and landscape change, thus making them courageous, antisocial, and passionate.[57] These characteristics also make Europeans less responsive to monarchical governments and more independent (23.4).[58] This focus on the impact of the climate and geography of the "seed" (*gonos*) as the point of impact is important and runs throughout the text.[59] It is especially important in considering some of the more extreme people in the text, such as the Scythian Nomads and the Makrokephaloi. This discourse of the seed and its generation or deterioration is, I think, a fundamentally important but underexplored aspect of the treatise that hints at a concept of ethnic purity that runs alongside the other forms of environmental determinism of the text.[60]

While in the text the term "Scythian" denotes the majority of the peoples (*genē*) of the Black Sea regions, they are divided into numerous tribes (*ethnē*), who differ from each other based on their climate and landscape. The Scythian Nomads inhabit the steppe and dwell the farthest north of all the Scythian tribes. According to the treatise, the Scythian Nomads are physically uniform as an *ethnos* because of the shared, stable climate; they are, as it were, "afflicted by cold" (*Aer.* 18.1). The harshly cold and wet climate of the region lasts year-round and so their summers and winters are the same. As a result (*Aer.* 19.5):

> . . . they wear the same clothes, eat the same food, breathe the same damp air, drink from the same snow-and ice-melted water, and refrain uniformly from labor. It is well known that where there are no strong shifts in climate neither bodies nor souls can endure physical activity. By necessity, then, their bodies are stout, fleshy, jointless, bloated, and flabby, while their lower bellies are the most bloated bellies of all peoples. It is nearly impossible for a stomach to dry out in such a land with a nature and climate of this sort. And, because of their fatness and smooth fleshiness, the bodies of all, male and female, are identical to each other. Since the seasons are constant, their genetic materials undergo no decay or damage when they merge, except through trauma or disease.

The Scythians have red hair and red skin because the cold burns them instead of the sun. The idea that cold burns and makes one red complements the commonplace in antiquity that Ethiopians and Indians were black-skinned because the sun had burned them. The culture, character, and physiology of the Scythian Nomads is unique among Scythians, but uniform among themselves due to the stability of the climate and the lack of shocks to alter the *gonos*, which would cause variety in physical form. Although climate does not shock the "seed" causing variation in Scythia (or in Asia, where the climate is equally uniform), cultural practices do impact the physiology and fertility of these nomads. The men are impotent because of their perpetual horse-riding coupled with poor medical practices,[61] while the women, who lead a lethargic lifestyle in wagons, have bodies so obese that their uteruses are clogged and closed off to a man's ejaculate (*Aer.* 21.2).[62] This situation bodes ill for retaining a consistent population. However, the author says that some Scythian men avoid impotence and breed with slave-women (*Aer.* 21.3); presumably this is how they perpetuate their people. The consistently harsh climate itself, more extreme in the far north than elsewhere, can be assumed to impact the seed by creating physiques among the Scythians unique to their climate; its consistent cold ensures the uniformity of the physiques of Scythians even for children not born of Scythian women. The lack of decay noted in the above passage means that the seed does not change during coagulation to impact this uniformity, but the impact of the extreme climate still marks the bodies of the Scythian Nomads as abnormal.

The infertility of the Scythians is one mark not only of the impact of climate on custom (they live as nomads because they live in the Scythian desert, *Aer.* 18), but of the inferiority of the Scythian Nomads to their Greek counterparts who dwell in a properly moderate climate. This inferiority is further marked by the necessary use of *technē* in order for Scythians to adapt and 'normalize' their bodies. The author assumes that the cold and wet climate would make them "by necessity" appear as "marvels of flab and fat" (*Aer.* 20), of a nature of the sort that is incapable of fertility (*Aer.* 21), and yet they do not: images of the Scythians found throughout the Greek world represent them as fit.[63] The author instead imagines that the Scythian Nomads used cauterization in order to reduce the bloatedness in their shoulders, arms, breasts, hips, and loins. The evidence of this cauterization, according to *Airs*, is "obvious" when one looks at a Scythian and sees that he is not fat.

The author particularly singles out the Scythian Nomads and other peoples in the treatise as anomalous people because they differ greatly from Greeks and other northern peoples. The author states that he does not discuss others because he considers them similar to the Greeks. The implication, therefore, is a type of hierarchy or, at least, ranking, of sameness or difference.[64] This difference and inferiority is further marked by the Scythians' persistent infertility (and their failed cures for it)[65] and their need for *technē* in order to appear 'normal.'

A people similar to the Scythian Nomads in this regard are the Makrokephaloi. With the Makrokephaloi, we see two dynamics at play: first, the use of technology to alter their nature—a sign of lesser peoples—and, second, a recognition that they can only maintain their adaptations of their bodies through restricting intermarriage with outside peoples. The physical changes enacted through technology could become heritable if the alteration through custom persisted over time and so long as they remained an insular people. According to Hesiod, the Makrokephaloi were born of the union of the *genos* of women descended from Pandora with the gods (Most Fr. 101 (Eratosthenes *FGrHist.* 224F 157a + f = Strabo 1.2.35). They apparently looked like everyone else in the beginning,[66] with heads of standard shape. Conical-shaped heads, however, seemed to them more aesthetically pleasing, and so they began to massage the heads of their infants until they achieved a conehead. The new shape then became a heritable characteristic: "Custom worked in the beginning in such a way that it

forced nature to follow suit" (*Aer.* 14.3–4).[67] It was only intermarriage with other tribes that eventually caused the cone shape to diminish.

The case of the Makrokephaloi is interesting and is one of a number of instances in *AWP* where human intervention alters the environmentally determined or 'natural' appearance of a people. This case is unique, however, in that over time, nature itself adapted the alteration and made it heritable. The Makrokephaloi themselves are fairly uniform in appearance—they live in a region along the Phasis River, an area identified as fairly uniform in climate. Thus, when they consistently work to alter their appearance, nature helps them retain this uniform shape since uniformity of shape is endemic to a stable climate such as they inhabit. This process was known in the eighteenth and nineteenth centuries as the heritability of acquired characteristics and was a hallmark of Neo-Lamarckian evolutionary theory. It was, in fact, the thing that made evolution possible. The Makrokephaloi manage to create such a consistent (and to them pleasant) adaptation that nature could not help but intervene. And yet, this preferred body shape was eventually lost because the Makrokephaloi became a mixed people through marriage outside of their group. Once again, we see hints of a concept of ethnic purity; even though the conehead would have been considered unpleasing to a Greek (Hesiod places them among the children of the *genos* of women and links them to other oddities of nature like the Pygmies and Kunokephaloi), to the Makrokephaloi and others, it was their defining characteristic—they are named for it, after all—and once they permitted intermarriage with non-Makrokephaloi, that defining characteristic is lost.

Conclusion

There are a number of ways in which the ancient Greeks imagined the relationship between identity and environment. They may appear on the surface wildly inconsistent and they certainly cannot be constrained into a single theory of identity and environment. Nonetheless, some underlying conceptual affinities and some modes of thought connect them. In each case, an ethnic group shares physical features and characteristics in part due to their relationship to the earth or environment. In each case, the 'pure' or 'unmixed' people are represented as better off or superior. Deviations from this 'pure' form are represented as 'corruptions' or 'deteriorations' of the human 'seed' (*gonos*), though further consideration of this idea in light of the medical texts and Aristotle is necessary. It is possible to say that some Greeks tended to understand that specific peoples were bound to specific lands, that the characteristics of particular lands and climates had determinative effects on human appearance, behavior, and moral character, and that some geographic and climatic locations were superior and others inferior. There is also sufficient evidence to suggest that some Greeks viewed intermarriage between ethnic or tribal groups as a risky venture because it could lead to degeneration of a people's character and customs and a deformation of their physical appearance.

It must be admitted that this complex of ideas was not the only way to conceptualize the problem of human diversity, political and social status, marriage, and citizenship. There are other conceptualizations, e.g. the variety of migration stories also in circulation in antiquity, which coexisted and even conflicted with environmental ideas. But we can hardly expect consistency here. The Greeks were not a unified people and they interacted with a broad range of non-Greeks whose own ideas and customs varied greatly. To expect a singular mode of thought or a single theory of human diversity in this situation would be foolish. That said, although inconsistent, we *can* see throughout an interest in categorizing and ranking of peoples in a way that normalizes one's own identity while marking that of others as defective or lesser. While some scholars prefer to link this interest to colonization and

imperial aspirations, these are not always underscoring Greek interactions with each other or non-Greeks. And even if it is linked to these dynamics in one manner or another, it is not the only or necessarily primary mechanism driving the formation of identity groups. The question of whether this ranking is racism, proto-racism, or ethnocentrism is, I believe, the wrong question. Rather, instead of attempting to discover if the ancients categorized foreign peoples in a manner similar to the way moderns do, we should focus on the processes of identity formation and try to engage the ancients on their own terms. As such, I think we can most safely link their ways of engaging with foreignness to a desire to know and understand that often emerges from a wide range of motivators including curiosity, wonder, and fear of difference or the unknown.[68]

Notes

1 All text for Herodotus follows Hude. Other texts will be noted when cited. All translations of ancient authors are my own unless otherwise noted.
2 See Thomas 2000, 31–2 for further discussion.
3 For discussions of built environment, see Clements and Spencer, this volume. On building programs as cultural enterprises that impacted ethnic identity in the ancient world, see, for example, Woolf 1994 (Roman East), Rowlandson 2003 (Alexandria and Egypt), and Andrade 2013 (Greco-Roman Syria).
4 Kaplan, this volume, and 2014.
5 For an overview of scholarship on the distinction, see Kaplan 2014 with bibliography, and Gruen 2013. Fraser 2009 gives a full treatment to the uses of various ethnic terminologies as a supplement to the *Lexicon of Greek Personal Names*.
6 Or, as they are now officially termed 'Caucasian,' 'African,' 'Asian,' 'Native American,' or 'Hispanic.' On the issue of 'race' as a modern, not an ancient category of thought, see Isaac 2004, 1–39; Hannaford 1996, 17–86, and McCoskey 2012, 1–34. Kametkar 2002 makes one of the sounder arguments I have seen for using the concept of race in studies of antiquity. On 'whiteness' as non-racial category antiquity, see Dee 2003. Sassi 2001 discusses the gender status of whiteness extensively. The idea of a singular black 'race' in antiquity is disputed as well, though there is a good deal of scholarship on 'blacks' in antiquity, including Snowden 1970 and 1991, Thompson 1989, and Bindman, Gates Jr., and Dalton 2010. There has been a great deal of controversy surrounding the issues of race in antiquity, the result of assuming that modern categories and systems of thought are mirrored easily in antiquity. I do not intend to engage in a debate over 'blackness' or 'whiteness' as ancient racial categories. There is no evidence that they apply in the classical period except in the eyes of the modern scholar. 'Blackness' as an idea existed, but it was not a *genos, ethnos, phulē*, etc. On whether there was such a thing as ethnicity in antiquity, see Gruen 2013.
7 This is not an exhaustive list of terms that can be used of identity groups in the Greek sources. These are simply the most common. Herodotus 1.56 uses *genos* to refer to Ionian and Dorian, but *ethnos* for Hellene and Pelasgian.
8 On the idea that racism or 'proto-racism' could exist in antiquity while race did not, see Isaac 2004 and 2006 and the essays in Eliav-Feldman, Isaac, and Ziegler 2009. See *contra* Tuplin 1999. Gruen 2013, 2–3 suggests that the 'ethnic' turn in scholarship is an attempt to avoid the cultural discomfort with the concept of 'race,' a term McCoskey 2012 intentionally uses in order to cause her readers discomfort. He sees, however, no difference between 'race' and 'ethnicity,' as both focus on biological associations and heredity. See Hall 1997 and 2002 and the essays in Malkin 2001 for examples of reading modern concepts of ethnicity among the ancient Greeks.
9 For discussion of the use of the term 'racialist' to define the Citizenship Law, see Lape 2010, 31–41. Her decision to read the ancient Athenian myth of autochthony and to define its citizenship through the lens of modern race theory has been controversial. See, for example, the reviews of Vlassopoulos 2011 and Blok 2014.
10 Herodotus provides an example of how moving to a new geographic region would not change the essential culture of a people in his discussion of the Colchians (2.104–5), who, he asserts, originated in Egypt based on their appearance (*melagchroes eisi kai oulotriches*), on the practice of circumcision (which is shared with the Ethiopians), and on the way they work linen, which is unique to Egypt.

For Herodotus, the cultural practices are the most sure identifiers of ethnicity since, as he says, appearance does not necessarily tell him anything, "for others are also such."

11 On the eastern origins of Hesiod's genesis of metal men, see Van Norden 2015, 50 with notes and bibliography.

12 All text for Hesiod follows G. Most.

13 Gold and silver were extracted from lead, copper, and other ores through cupellation in antiquity. In cupellation, the metals are heated to high temperatures that separate off the precious metals (which melt at much higher temperatures) from the base metals. The process is rather simple—because the base metals oxidize while the noble metals do not, the metals separate easily (though gold and silver do not separate easily from each other).

14 Van Norden 2015, *passim* discusses Hesiod's golden men at length and the legacy of the 'Golden Age' narrative that derived from him in future utopic literature in Greece and Rome.

15 Not to mention the fact that iron, unlike bronze, silver and gold, rusts. There are intriguing possible connections between Prometheus as master of fire and *technai* with his later mythology as creator of mankind. There may be some component of ascribing inferiority to Promethean man versus Olympian-made man as well as connections of Prometheus' granting fire to man with the creating of Pandora, the bane of humanity. In *Prometheus Bound*, Prometheus tells the chorus that he "planted blind hope within them" (*tuphlas elpidas*, 250), perhaps a reference to Pandora and the jar. Prometheus also notes in the play that it was he who led them to discover the metals hidden in the earth—copper, iron, silver, gold—and how to work them (*Prom.* 500–503). Surely, the play's author is engaging the tradition of Hesiod and the relationship between the *genē* of men and Pandora. On Promethean *technai*, see Calame 2010, 36–48.

16 They are said to have mothers, but where the mothers come from is unclear. The poem clearly states that Zeus made them, not that they were born.

17 I have retained the full Greek passage here because of its fragmentary nature.

18 This is not a comprehensive overview of stories of autochthony or *gēgenesis*. Such a discussion would take up more than the allotted space for this chapter. I have attempted to highlight particularly informative passages that show intellectual consistency with each other. For a general introduction to autochthony and identity, see Morgan 2014.

19 The story of Prometheus as the maker of humans is a rather late invention, appearing for certain in Ovid (*Met*. 1.76–88) at the earliest, though it may possibly have been circulating in the fourth century BCE; there are hints of a creator-craftsman god in Plato's *Protagoras* and *Timaeus*. See Stafford 2009, 430–43.

20 On the origins of the term *autochthōn* and its meanings, see Rosivach 1987.

21 Louraux 2000, 6–7 and 1993, 73–4.

22 From *LSJ*: "*mix* something *dry with* something *wet,* mostly with a sense of *mixing so as to spoil* or *defile* (*gaian hudei*), Hes. Op. 61."

23 On the *pithos* as womb and sex as the source of evils, see Glenn 1977; Sissa 1990, 154–5; Zeitlin 1996, 59–60.

24 Loraux 1993, 88–102 discusses the distinction at some length, especially in connection with Semonides.

25 I discuss the Makrokephaloi and Scythians below. Most Fr. 98 (*P. Oxy*. 1358 fr. 2 col. I; 15: Strabo *Geo.* 7.3.7) suggests the *Melanes* (Black ones) and Ethiopians and *amenēnoi* (strengthless) Pygmies are born from Hephaistos with some unknown woman. The other distant peoples mentioned are the Hyperboreans, Laistrygonians, and Kephallians. Most Fr. 101 (Eratosthenes *FGrHist.* 224F 157a + f = Strabo 1.2.35) mentions the Makrokephaloi, Pygmies, and Half-Dogs (Hemikunas). On these peoples, see Garland, this volume.

26 Later versions of this story make the *laas*-born men the replacement for all humanity destroyed in the flood (Apoll. 1.7.2; Ovid. *Met.* 1.381–415).

27 Especially in funeral oratory and in public monuments like the Erechtheion (see Clements, this volume). I would even argue that the idea that all Athenians who died in battle should be returned and interred in Attic soil was a public/popular manifestation of this discourse. Practical considerations aside, the myth of autochthony had an ideological life of its own beyond the identity politics of the average Athenian; it was meant, in many ways, to supersede local identities that were still strongly embedded among the Athenian citizenry long after the Cleisthenic reforms. On funeral oration and autochthony, see Loraux 1986. On continuations of local identities as competitors with Athenian identity, see, on the Acharnians specifically, Kellogg 2013, Ch. 4, esp.

28 Gruen 2013, 4; See also Kaplan, this volume, and 2014. Gruen points to the criticisms of the autochthony myth in Plato's *Menexenus* as support for the lack of widespread support within Athens.

Lape 2010 argues, however, that the discourse of autochthony borrowed from elite discourses of descent and privilege. It may have been the crassness and even comic nature of the autochthony myth (and its democratizing impact) that elites such as Plato scorned, not the notion of Athenian exceptionalism or 'purity.' As Pelling concludes, in Athenian rhetoric, "autochthony was a good thing to have" (2009, 474). But it should not surprise us that they attempted to make their autochthony superior to that claimed by others. On negative types of autochthony, see Calame 1985.

29 We might consider those who believe absolutely that the United States is a "white, Christian nation," despite ample evidence that the country has been culturally, religiously, and ethnically diverse since its origins.

30 Lape 2010, 31–5.

31 On the citizenship law and relevant bibliography, see Kennedy 2014, 12–25.

32 Rosivach 1987, 302–3; Kennedy 2014, 38–67, esp.; Lape 2010, 167–70, esp.

33 Bakewell 1999, 10; Kennedy 2014, chs. 2 and 4.

34 On landownership/agrarian ideology and citizen identity, see Morgan 2014, 68–73.

35 Meaning, it bound the landless craftsmen, sailors, and others to the city despite their lack of agrarian roots: Kennedy 2014, 8.

36 Strabo later asserts that the Pelasgians were Arcadians, citing Hesiod.

37 On the Pelasgians in Herodotus, see Sourvinou-Inwood 2003 and McInerney 2014.

38 And then added the name Ionians, when Ion, son of Xouthos becomes their leader (8.44.2): Thomas 2000, 120. Sourvinou-Inwood 2003 does not see the Athenians/Pelasgian connection incompatible with Athenians as Hellenes, Pelasgians being just another of the Greek *ethnē* (138–40, esp.).

39 On Thucydides' use of the autochthony *topos,* especially with respect to non-Athenians, see Pelling 2009, 476–9.

40 Kennedy 2014, 17–19, with bibliography.

41 The right of *enktesis* is a manifestation of this connection—one may not own land, but one may have the right to ownership. See Leão 2012 on *enktesis* and Euripides' *Ion.*

42 See Clements, this volume.

43 For example, Saxonhouse 1992, 77 writes that Euripides' decision to assert the importance of woman in preserving Athenian purity works against the idea of autochthony, which Loraux 1993 and others argue elides women out of the reproductive process.

44 Lape 2010, 95.

45 See also 668–75 where Ion hopes that his mother is an Athenian since "if a foreigner, even if a citizen in name, comes to that pure city (*katharan polin*), his tongue is slavish and he lacks *parrhesia*."

46 See Kennedy 2014, 26–38 on a similar dynamic in Aeschylus' *Suppliants*.

47 This phrase concerning the descendants of Ion as born of the same root recalls the entrance of Athena in Aeschylus' *Eumenides* where she states that the land of the Troad had been given to her "root and stock for all time." Her claims to land outside of Athens run deep. On Athena as synonymous with Athens in tragedy and civic discourse more generally in Athens, and for tragedy and Athena in particular as a vehicle for imperial expansion, see Kennedy 2009. On the colonialist roots of Apollo and the name Ion in the play, see Doughtery 1996, 260–62.

48 I use the Greek text of Jouanna 1996.

49 Calame 2014, 2 briefly discusses *AWP* as part of his re-examination of the nature/custom divide in French Structuralist thought.

50 See Kennedy, forthcoming, for a discussion of the Hippocratic idea of using technology to alter environmental impacts and its reception, and Spencer, this volume, for the importance of environmental technologies as an ethnic identifier in Vitruvius.

51 The theory may be rooted in the idea that humors (*ikmades*) existed within the earth as well as in people. This is an idea that needs exploring in another context. See Thomas 2000, 50–51 on the importance of *ikmades* in Hippocrates and Herodotus.

52 On water and health in *AWP*, see Jouanna 2012. See also Lincoln 2000, 15–20.

53 See Thomas 2000, 35–74, and Bosak-Schroeder and Almagor, this volume, for discussion of health as an ethnic category. On the gender implications of some of these stereotypes, see Sassi 2001, ch. 3, esp., and King 1998, 21–39.

54 See Calame 2005, Romm 2010, Cole 2010, on the dividing line between Asia and Europe and its importance for ethnic thinking in antiquity.

55 On the waters of Asia as inducing pleasure-seeking, see Harmon, this volume. An apt comparison is to the Lotus Eaters of Homer's *Odyssey*.

56 Expanded upon at *Aer.* 24.

57 The text here recalls Cyrus' admonition to his troops in Herodotus cited in the opening quotation to the chapter. Herodotus considers such shocks resulting from climate shifts as the cause of ill health (2.77.3); just as they alter physical appearance, so too they cause diseases. It is only a short next step to equating visible ethnic differences with being diseased, or with monstrosity or deformity. See Garland, this volume.

58 Roman authors such as Pliny (*Natural History* 2.80), Vitruvius (*de Architectura* 6.1.3), and Seneca (*de Ira* 2.15) who adhere to the environmental view of character, classify the Germans much like how Greek authors represent the southernmost of the northern tribes whose bodies undergo repeated shocks from the fluctuation of extreme temperatures and landscape. See Irby, this volume.

59 But it is not addressed in *On the Seed* and it is unclear to me yet whether the idea occurs elsewhere in the Hippocratic corpus. See Isaac 2004, 74–8.

60 Perhaps a comparison with other Hippocratic texts or Aristotle's embryology will elucidate the matter further, but that is for another study. Another *comparata* is the Aristotelian *Problemata* (third century BCE–fifth century CE) 14, which lies outside the time frame of this paper. See recently, however, Leunissen 2015, 190–213. Ward 2002 also discusses the climatic impact on *ethnē* in Aristotle's *Politics,* which appears to follow the Hippocratic tradition rather directly. The *Problemata*, as Leunissen remarks, is focused on "the *causal interaction* between the mixture of the environment and the mixture underlying the material properties of the peoples living in that environments" (190).

61 See also Hdt. 4.67 and 1.105.4 on the Scythian Enarees, and Thomas 2000, 33.

62 The fertility of the women in various climates is a focus throughout the work. Some modern studies of the impact of extreme obesity on fertility look backward to this text as early recognition of the connection. Quoting the description of the Scythian nomads specifically, one such study comments: "A thousand years ago [*sic*], Hippocrates has already recognized the influence of nutritional status and obesity on reproductive function . . ." (Diamanti-Kandarakis and Bergiele 2001).

63 On images of Scythians in Greek sources, see Ivanchik 2005.

64 This hierarchy is made explicit in the writing of the Roman authors who considered the temperate zone where Rome was located to be the best climate to produce the best peoples. See Spencer, this volume.

65 *Aer.* 22. The cure they use, according to the author, is to cut the vein behind the ears—this 'cure' is what actually causes the impotence, according to the text.

66 Possibly Hephaistos, in a transparent attempt to connect physical difference with deformity and the lame god. On deformity and associations with Hephaistos, see Garland 2010, 61–3, esp.

67 The ancient notion of heredity expressed in this treatise lacks a complete understanding as to what is and what is not a heritable quality and how something becomes so. For example: "If, then, bald children come from bald parents and grey-eyed children from grey-eyed parents and deformed children from deformed parents, and so on, would it not be the case with other physical characteristics?" (*Aer.* 14.4).

68 Many thanks to those who helped me bring this chapter to its final form (though the ideas are far from finalized). In particular, I owe thanks to the audience at Brown University, where I presented a portion of this chapter, for their comments and suggestions. I am also grateful to colleagues and scholars on Academia.edu who took the time to read and comment on the short version. Both Max Goldman and Molly Jones-Lewis also took time to read and comment on more than one draft of this chapter before the end and deserve some credit, though no blame, for the final version.

Bibliography

Andrade, Nathanael. 2013. *Syrian Identity in the Greco-Roman World*. Cambridge and New York: Cambridge University Press.

Bakewell, Geoff. 1999. "Lysias 12 and Lysias 31: Metics and Athenian Citizenship in the Aftermath of the Thirty." *Greece, Rome, and Byzantine Studies* 40: 5–22.

Bindman, D., H.L. Gates, Jr, and K. Dalton, eds. 2010. *The Image of the Black in Western Art*. Cambridge, MA: Belknap Press.

Blok, Josine. 2014. "Book Review: *Race and Citizen Identity in the Classical Athenian Democracy*, by S. Lape." *Mnemosyne* 67: 869–73.

Calame, Claude. 1985. "Les figures grecques du gigantesque." *Communications* 42(1): 147–72.

——. 2005. *Masks of Authority: Fiction and Pragmatics in Ancient Greek Poetics*. Ithaca, NY: Cornell University Press.

——. 2010. *Prométhée Généticien. Profits Techniques et Usages de Metaphors*. Paris: Les Belles Lettres.

——. 2014. “Pour Dépasser l’Opposition Nature/Culture: Une Perspective Anthropologique et Alter-mondialiste.” *Les Possibles* 3: 1–6: https://france.attac.org/nos-publications/les-possibles/numero-3-printemps-2014/dossier-l-ecologie-nouvel-enjeu/article/pour-depasser-l-opposition-nature, accessed April 9, 2015.

Cole, Susan. 2010. “‘I Know the Number of the Sand and the Measure of the Sea’: Geography and Difference in the Early Greek World.” In *Geography and Ethnography: Perceptions of the World in Pre-modern Societies*, edited by K. Raaflaub and R. Talbert, 197–214. Malden: Wiley-Blackwell.

Dee, J.H. 2003. “Black Odysseus, White Caesar: When Did ‘White People’ Become ‘White’?” *Classical Journal* 99: 157–67.

Diamanti-Kandarakis, E. and A. Bergiele. 2001. “The Influence of Obesity on Hyperandrogenism and Infertility in the Female.” *Obesity Review* 2: 231–8.

Doughtery, Carol. 1996. “Democratic Contradictions and The Synoptic Illusion of Euripides’ *Ion*.” In *Demokratia: A Conversation on Democracies Ancient and Modern*, edited by J. Ober and C. Hedrick, 249–70. Princeton, NJ: Princeton University Press.

Eliav-Feldon, Miriam, Benjamin Isaac and Joseph Ziegler, eds. 2009. *The Origins of Racism in the West*. Cambridge: Cambridge University Press.

Fraser, Peter M. 2009. *Greek Ethnic Terminology*. Oxford: Oxford University Press.

Garland, Robert S.J. 2010. *The Eye of the Beholder: Deformity and Disability in the Graeco-Roman World*. 2nd edn. London: Bristol Classical Press.

Glenn, Justin. 1977. “Pandora and Eve: Sex as the Root of All Evil.” *Classical World* 71: 179–85.

Gruen, Erich. 2013. “Did Ancient Identity Depend On Ethnicity? A Preliminary Probe.” *Phoenix* 67: 1–22.

Hall, Jonathan. 1997. *Ethnic Identity in Greek Antiquity*. Cambridge and New York: Cambridge University Press.

——. 2002. *Hellenicity: Between Ethnicity and Culture*. Chicago, IL: University of Chicago Press.

Hannaford, I. (1996). *Race: The History of an Idea in the West*. Washington, DC: Woodrow Wilson Center Press.

Isaac, Benjamin. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.

——. 2006. “Proto-Racism in Graeco-Roman Antiquity.” *World Archaeology* 38: 32–47.

——. 2009. “Racism: A Rationalization of Prejudice in Greece and Rome. In *The Origins of Racism in the West*, edited by M. Eliav-Feldman, B. Isaac, and J. Ziegler, 32–56. Cambridge: Cambridge University Press.

Ivanchik, Askol’d I. 2005. “Who Were the ‘Scythian’ Archers on Archaic Attic Vases?” *Scythians and Greeks: Cultural Interactions in Scythia, Athens, and the Early Roman Empire (Sixth Century BC–First Century AD)*, edited by D. Braund, 100–113. Exeter: University of Exeter Press.

Jouanna, Jacques. 2012. “Water, Health and Disease in the Hippocratic Treatise *Airs, Waters, Places*.” In *Greek Medicine from Hippocrates to Galen*, edited by J. Jouanna, 155–72. Leiden: E.J. Brill.

Kamtekar, Rachana. 2002. “Distinction without a Difference? Race and *Genos* in Plato.” In *Philosophers on Race: Critical Essays*, edited by J. Ward and T. Lott, 1–13. Malden: Wiley-Blackwell.

Kaplan, Philip. 2014. “Ethnicity and Geography.” In *A Companion to Ethnicity in the Ancient Mediterranean*, edited by J. McInerney, 298–311. Malden: Wiley-Blackwell.

Kellogg, Danielle. 2013. *Marathon Fighters and Men Of Maple: Ancient Acharnai*. Oxford: Oxford University Press.

Kennedy, Rebecca Futo. 2009. *Athena’s Justice: Athena, Athens, and the Concept of Justice in Greek Tragedy. Lang Classical Studies* 16. New York: Peter Lang.

——. 2014. *Immigrant Women in Athens: Gender, Ethnicity, and Citizenship in the Classical City*. London and New York: Routledge.

——. Forthcoming. “Otis Mason and Hippocratic Environmental Theory at the Smithsonian Institution in the Nineteenth and Early Twentieth Centuries.” In *Classics and Early Anthropology*, edited by Emily Varto. Leiden: E.J. Brill.

King, H. (1998). *Hippocrates’ Woman. Reading the Female Body in Ancient Greece*. New York and London: Routledge.

Lape, Susan. 2010. *Race and Citizen Identity In The Classical Athenian Democracy*. New York: Cambridge University Press.

Leão, Delfim. 2012. “The Myth Of Autochthony, Athenian Citizenship And The Right Of *Enktesis*: A Legal Approach to Euripides’ *Ion*.” In *Akten der Gesellschaft für Griechische und Hellenistische*

Rechtsgeschichte, edited by E. Cantarella *et al. Verlag der Österreichischen Akademie der Wissenschaften* 23: 135–52.
Leunissen, M. 2015. "The Ethnography of *Problemata* 14 in (its Mostly Aristotolian) Context." In *The Aristotelian Problemata Physica: Philosophical and Scientific Investigations*, edited by R. Mayhew, 190–213. Leiden: E.J. Brill.
Lincoln, Bruce. 2000. "Death at the Strymon." *Classical Philology* 95: 12–20.
Louraux, Nicole. 1986. *The Invention of Athens: The Funeral Oration in Classical Athens*. Cambridge, MA: Harvard University Press.
——. 1993. *Children of Athena: Athenian Ideas about Citizenship and the Division Between the Sexes*. Princeton, NJ: Princeton University Press.
——. 2000. *Born of the Earth: Myth and Politics in Athens*. Ithaca, NY: Cornell University Press.
Malkin, Irad. ed. 2001. *Ancient Perceptions of Greek Ethnicity.* Washington, DC: Center for Hellenic Studies.
McInerney, Jeremy. 2014. "Pelasgians and Leleges: Using the Past to Understand the Present." In *Valuing the Past in the Greco-Roman World: Proceedings from the Penn-Leiden Colloquia on Ancient Values VII*, edited by J. Ker and C. Pieper, 26–55. Leiden: E.J. Brill.
McCoskey, Denise. 2012. *Race: Antiquity and its Legacy (Ancient and Moderns)*. London: IB Tauris.
Morgan, Katherine. 2014. "Autochthony and Identity in Greek Myth." In *A Companion to Greek Democracy and the Roman Republic*, edited by D. Hammer, 67–82. Malden: Wiley-Blackwell.
Pelling, Christopher. 2009. "Bringing Autochthony Up-To-Date: Herodotus and Thucydides." *Classical World* 102: 471–83.
Romm, James. 2010. "Continents, Climates, and Cultures: Greek Theories of Global Structure." In *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies*, edited by K. Raaflaub and R. Talbert, 215–36. Malden: Wiley-Blackwell.
Rosivach, Vincent. J. 1987. "Autochthony and the Athenians." *Classical Quarterly* 37: 294–306.
Rowlandson, J. 2003. "Town and Country in Ptolemaic Egypt." In *A Companion to the Hellenistic World*, edited by A. Erskine, 249–63. Malden: Wiley-Blackwell.
Sassi, Michela. 2001. *The Science of Man*. Chicago, IL: University of Chicago Press.
Saxonhouse, Arlene. W. 1992. *Fear of Diversity: The Birth of Political Science in Ancient Greek Thought*. Chicago, IL: University of Chicago Press.
Sissa, Giulia. 1990. *Greek Virginity*. Cambridge, MA: Harvard University Press.
Snowden, Frank. 1970. *Blacks in Antiquity: Ethiopians in the Greco-Roman Experience*. Cambridge, MA: Harvard University Press.
——. 1991. *Before Color Prejudice.* Cambridge, MA: Harvard University Press.
Sourvinou-Inwood, Christiane. 2003. "Herodotus (and Others) on Pelasgians: Some Perceptions of Ethnicity." In *Herodotus and His World: Essays from a Conference in Honor of George Forrest*, edited by P. Derow and R. Parker, 103–44. Oxford: Oxford University Press.
Stafford, Emma. 2009. "Visualizing Creation in Ancient Greece." *Religion and the Arts* 13: 419–77.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science and the Art of Persuasion*. Cambridge and New York: Cambridge University Press.
Thompson, Lloyd. 1989. *Romans and Blacks*. Norman: University of Oklahoma Press.
Tuplin, Christopher. 1999. "Greek Racism? Observations on the Character and Limits Of Greek Ethnic Prejudice." In *Ancient Greeks East and West*, edited by G. Tsetskhladze, 47–75. Leiden: E.J. Brill.
Van Norden, Helen. 2015. *Hesiod's Races of Man*. Cambridge: Cambridge University Press.
Vlassopoulos, Kostas. 2011. "Review of S. Lape. *Race and Citizen Identity in the Classical Athenian Democracy*." *Ancient History Bulletin* 23: 158–60.
Ward, Julie. 2002. "*Ethnos* in the *Politics*: Aristotle and Race." In *Philosophers on Race:Critical Essays*, edited by J. Ward and T. Lott, 14–37. Malden: Wiley-Blackwell.
Woolf, Greg. 1994. "Becoming Roman, Staying Greek: Culture, Identity and the Civilizing Process in the Roman East." *Proceedings of the Cambridge Philological Society* 40: 116–43.
Zeitlin, Froma. 1996. *Playing the Other: Gender and Society in Classical Greek Literature*. Chicago, IL: University of Chicago Press.

2

THE ECOLOGY OF HEALTH IN HERODOTUS, DICAEARCHUS, AND AGATHARCHIDES

Clara Bosak-Schroeder

'Environmental determinism' is the idea that climate, geography, or other environmental factors cause people to look and behave the way they do. Scholars of classical antiquity have seen this theory at work especially in the Hippocratic *Airs, Waters, Places*, but also in Herodotus' *Histories* and the ethnographic texts that follow them.[1] As Rosalind Thomas has shown, ancient Greek authors often associated environmental factors, especially climate, with certain health outcomes. The ethnic Others who were thought to inhabit markedly different climates were therefore prime material for theorizing the effect of environment on health; Thomas gives the name 'the ethnography of health'[2] to Greek writers' use of ethnic Others to theorize health. Greek writers also associated good health with their own earlier stages of development. Hesiod's golden race, for example, neither grows old nor suffers physical ailments (Hes. *Op.* 109–120).

In this chapter, I consider the relationship between good health as an attribute of distant times and of distant peoples. Ancient Greek writers believed health to be an outcome not only of certain environmental accidents, such as climate, which humans must suffer passively, but of the ecological relationships humans undertake with the rest of nature. I then consider to what extent these ecologies of distant times and far-off places could be abstracted from time and space and applied in the Greek present. In the process, I show that agriculture is crucial to Greek theories of health and that Greek 'ethnographies,' descriptions of ethnic Others, and 'cultural histories,' Greek accounts of their own deep past, constitute a single discourse, which I call 'the ecology of health.' In Greek classical and Hellenistic thinking about good health, human interventions play as great a role as environmental accident, and in some cases Greek writers represent good health as largely under human control.[3]

Dicaearchus' golden age and the Hippocratic corpus

In his *On Abstinence* (third century CE), Porphyry uses Dicaearchus' second-century BCE *Bios Hellados*, or *Life of Greece* to support his argument against eating meat.[4] In this work, which is typically categorized as 'cultural history' or 'historical anthropology,' Dicaearchus adapts Hesiod's metallic races to divide early Greek history into three distinct ecological phases marked by a particular mode of subsistence: life under Cronus (*ho epi Kronou bios*), the

pastoral life (*ho nomadikos bios*), and the agricultural life (*ho geōrgikos bios*). In Dicaearchus' scheme, Greeks degenerated as they proceeded through these stages. The first *bios* was "the best" and the people who lived then were "the most excellent." Quoting Hesiod's *Works and Days*, Dicaearchus says that they were rightly considered a "golden race."[5]

According to Dicaearchus, the earliest Greeks were vegetarians who ate the spontaneously growing fruits of the earth.[6] This was not an ethical vegetarianism, however, but an accidental one, since human beings had no art with which to cultivate food or herd animals. As Dicaearchus says (Dicaearch. 56A = Porph. *De Abst.* 4.2):

> All things are reasonably said to have grown spontaneously (*automata*); for human beings did not procure anything themselves, being still ignorant of agriculture or any other art (*technē*). This very thing was the reason for their being at leisure, living life without toil or care, and, if it is appropriate to assent to the opinion of our most accomplished doctors, the reason why they didn't get sick. For one could find no precept more conducive to their health than to avoid the production of excesses, from which they kept their bodies entirely pure. For they neither consumed food that was stronger (*ischurotera*) than their nature but only such that their nature could overcome, nor more than is moderate because of its ready availability but for the most part less than would seem sufficient because of its scarcity . . . But to those coming after, who pursued great things and fell into many evils, this way of life naturally became desirable. The simple (*litos*) and spontaneous (*autoschedios*) food of earlier people is made clear in the later saying 'enough of oak,'[7] which is what the first person who changed [from the earlier way of life] probably said.

While the golden age is idealized in general, Dicaearchus' emphasis on health is striking. What about the "spontaneous" food of the earliest Greeks makes it so healthy? One way to understand this passage is by comparing it to discussions of health in the Hippocratic corpus, a collection of medical texts dated to between 430 and 400 BCE, most of which were written on the later end of this range.[8] Dicaearchus does not mention Hippocratic doctrine explicitly, but other scholars have noted that he uses Hippocratic vocabulary to explain the healthiness of this first diet, and have read the *Life of Greece* as influenced by the earlier Hippocratic writings. In Hippocratic theory, some foods are stronger than others and food competes with other aspects of regimen to determine the health of the body.[9] Yet despite the fact that Dicaearchus explains the healthiness of the earliest diet by way of Hippocratic theory, the life of Greeks under Cronus is difficult to map directly onto Hippocratic regimen, which is much more contingent on other variables than Dicaearchus' model allows. In the Hippocratic corpus, foods are rarely good or bad per se; they are good or bad for certain constitutions and in certain seasons: this is the principle at work in *Regimen in Acute Diseases.* Furthermore, Hippocratic medicine makes subtle distinctions not only between agricultural or pastoral products, or even land and sea animals, or fruits and vegetables, but between barley as opposed to wheat, pork as opposed to beef (Hp. *Acut*. 2.39ff.).[10] If Dicaearchus' regimen were simply Hippocratic, we would expect a more detailed breakdown of particular foods.

Moreover, when uncultivated foods are discussed in the Hippocratic corpus, they are emphatically not recommended (Hp. *VM.* 3):

> [The people of the past, who ate what the earth produced] suffered many terrible things from their excessive and beast-like way of life, ingesting things raw and

> untempered and those possessing strong powers [*megalas dunamias*]. Those [then] suffered just as they would suffer now, falling into severe pains and illnesses, and quickly into death . . . For this reason I think that [the people of the past] harmonized their food with their natures and discovered the sort of food which we now eat. From wheat, after soaking, pounding, grinding, sifting, mixing, and baking it, they made bread.

When Dicaearchus talks about the food of the first *bios* not being "stronger" than the constitution of the people of that time, he is alluding to Hippocratic teaching about the "strong qualities," *megalai dunamiai*, of certain foods also explored in this passage. But a close comparison of the two reveals that Dicaearchus disagrees with the Hippocratic opinion of ancient diet. Whereas *On Ancient Medicine* argues that ancient diet overpowered a good proportion of people (whose constitutions, of course, differed), Dicaearchus says that the ancient diet benefited people precisely because it did not overpower them. In *On Ancient Medicine*, health progressed because people adopted diets that harmonized with their different constitutions, eschewing *akratos*, "untempered" foods animals eat "such as those that grow from the earth: fruits, bark, and grass," in preference for bread, which is produced by "soaking, pounding, grinding, sifting, mixing, and baking." By contrast, the *Life of Greece* associates good health with foods that spring spontaneously from the earth and without the application of agriculture. The *technē* at play in each author is also subtly different. Both Dicaearchus and the Hippocratic author contrast ancient and modern diet, but the mechanism for distinguishing them differs: Dicaearchus emphasizes agriculture, while for the Hippocratic author, cooking has made all the difference. Thus, Dicaearchus applies some Hippocratic vocabulary, but his theory of nonagricultural diet is incompatible with the Hippocratic treatment of the same subject in *On Ancient Medicine*.[11]

Although the *Life of Greece* and *On Ancient Medicine* both discuss "strong qualities" in foods and their effect on health, they have opposing philosophies of human progress. That ancient opinion was divided about the quality of life in the ancient past is well known and Dicaearchus and the author of *On Ancient Medicine* represent the two basic positions well, at least in respect to health and diet. For Dicaearchus and others of the 'pessimistic' view, health has declined as human diet has advanced; these writers characterize humans' earliest food as "simple" and healthy. For the author of *On Ancient Medicine* and other 'progressivists,' time and *technē* have only (or largely) made things better;[12] these writers characterize uncultivated foods as "raw" and "untempered" and associate good health with the arts of later times.

However, there is another set of texts we can use to contextualize Dicaearchus, texts that, like the *Life of Greece*, describe health in general terms and attribute health or illness to the characteristics of groups rather than individuals. These texts treat ethnic Others, peoples contemporary with the ancient Greeks but distant from them in space; we generally call these texts ethnographies.[13] In what follows, I examine two ethnographic accounts, one in Herodotus' fifth-century BCE *Histories* that preceded Dicaearchus' *Life of Greece*, and another in Agatharchides' third-century BCE *On the Erythraean Sea* that followed it,[14] posing new answers to the logic of health behind Dicaearchus' work and exploring the interaction among these three texts. The ethnographies express philosophies of human development very similar to the 'progressivist' and 'pessimistic' philosophies characteristic of cultural history, and make arguments to their readers about the advisability of certain diets just as the *Life of Greece* and *On Ancient Medicine* do.

Herodotus' *Histories*: meat and milk vs. bread

In the third book of Herodotus' *Histories*, Cambyses sends a delegation of Icthyophagoi, "Fish Eaters," to the Aithiopes, a people living in Africa. While ostensibly there to extend the hand of Persian friendship, the Icthyophagoi have in fact been sent to spy.[15] Herodotus says that Cambyses is especially interested in whether the Table of the Sun really exists, a table that is supposed to produce food spontaneously for the Aithiopes year round. The scene unfolds comically as the Aithiopes systematically reject most of the gifts the Persians present, thereby providing a running commentary on Persian (and also Greek) culture which James Romm has aptly dubbed "ethnologic satire."[16] Particularly interesting for present purposes are the Aithiopian king's comments on the Persian diet (Hdt. *Hist.* 3.22.11–3.23.5):

> And when he came to the wine and learned how it was made, he took exceedingly great pleasure in it, and asked what the Persian king ate and what was the highest age a Persian man could attain. And they said that he ate bread, explaining the nature of [the growing of] wheat, and that 80 years of life was the greatest measure allotted to a man. To these things the Aithiopian said that if they ate shit (*kopros*) it was no wonder they lived so few years; for they would not be able to live even that long if they didn't sustain themselves with this drink (indicating to the Icthyophagoi the wine): for in this they had been beaten by the Persians. To the Icthyophagoi asking in turn about their way of life and life-span, the king said that most of them reached 120 years, and some lived even longer, and that their food was boiled meat and their drink milk.

Although the Aithiopian king appreciates the gift of wine, a trope in other ethnographic texts,[17] he calls bread, the staff of both Persian and Greek life, *kopros*, "shit," and attributes the Persians' relative short-livedness to this dietary mistake.[18] The Aithiopes, by contrast, consume only meat and milk, the products of pastoralism rather than agriculture, and it is to their diet that they attribute their longevity. Just as Dicaearchus placed good health in a nonagricultural time, so does this passage of Herodotus' *Histories* locate good health in a nonagricultural space, Aithiopia, where people do not cultivate crops according to the story. Although neither the Persian delegation nor the Aithiopian king align their diets with particular temporal phases of cultural development, the scene juxtaposes the pastoral food of the Aithiopes with the agricultural food of the Persians in the same way that temporal schemas like Dicaearchus' account of Greek *bioi* juxtapose phases of civilization characterized by different diets. The encounter Herodotus stages between the Persian envoys and the Aithiopian king is not only an ethnologic satire, but also a biting parody of culture-heroism; here, the Persian delegation, like Dionysus or Heracles, brings agricultural products to the Aithiopes, but they reject most of these gifts, preferring the ecological practice of pastoralism that has ensured their longevity. Rather than validating Greek agriculturalism and civilization as scenes of culture-heroism typically do, this encounter between Aithiopes and Persian envoys calls into question whether Greeks should have adopted agriculture or should continue to practice it now.

On the other hand, elements of the Aithiopian way of life distinguish the Aithiopes very clearly from those who inhabit Dicaearchus' golden age. The majority of Aithiopes may believe that the Table of the Sun produces food for them spontaneously, but Herodotus tells us that this is a trick of the Aithiopian leadership. Of the Table, he says (Hdt. *Hist.* 3.18):

> There is a meadow in the area surrounding the city quite full of boiled meats of every sort of quadruped. Every night, it is each time the duty of those in office to place the

> meats on the table, and during the day everyone who wishes to comes and feasts. But the locals say that the earth yields these things each time.

The Aithiopes eat pastoral products which seem to them to spring spontaneously from the earth but are in fact supplied secretly by the Aithiopian leadership. For most Aithiopes, there is little practical difference between a truly spontaneous, "golden" diet and what they experience, but this difference—and the deceit it involves—undercuts the Aithiopes as a paradigm to be emulated.

The fact that the Table is not what it seems also affects Cambyses and his army. After Cambyses' spies return to him and report what they have seen and heard, Cambyses becomes enraged and sends his troops against Aithiopia. This march is a complete disaster. Cambyses, who had before been so keenly interested in the Table of the Sun, ironically fails to provision his army appropriately.[19] As a result, they march desperately backward into a developmentally earlier way of life (Hdt. *Hist.* 3.25.13–23):

> Before his army had completed a fifth part of the journey, suddenly all of the food they had brought ran out, and after the food was gone they ate the pack-animals, until they also ran out . . . As long as the soldiers could get anything from the earth they survived by eating grass; but when they came to the desert, some of them did a terrible thing, selecting by lot one man from each ten and eating him.

This passage is not only a famine narrative, but also an imagined journey into a nightmarish version of human beginnings.[20] Herodotus does not explicitly compare the army's declining diet to the dietary phases of cultural histories, but he employs the same language to imagine the scene. Instead of eating animals raised for that purpose, like goats or sheep or cows, the soldiers eat their horses. Instead of gathering berries and other products of the earth, as in the golden age, they eat grass. Finally, they arrive at the point where the human diet collapses in on itself, and consume one another. As in *On Ancient Medicine*, where the earliest humans ate "fruit, bark, and grass," so too are the Persians forced to eat grass as a last resort before turning to cannibalism. Cambyses' troops have not only marched into the past, they experience the worst version of the past imagined by progressivists.

It is impossible to determine the direction of influence, but *On Ancient Medicine* is an important intertext for another Herodotean famine narrative. In book 8, Xerxes' retreating army falls ill and dies after consuming a diet of grass and bark (8.115, 117).[21] Like *On Ancient Medicine*, both famine narratives in the *Histories* denigrate nonagricultural diets and associate them with particular foodstuffs, especially bark and grass. Rather than promoting health as they do in the *Life of Greece* and Herodotus' Aithiopia, nonagricultural foods in these passages lead to illness and death.

Although the famine that afflicts Xerxes' army in book 8 occurs at a distance from Cambyses' embassy to the Aithiopes in book 3, Cambyses' army experiences their own famine directly after the embassy and perhaps as a result of the misinformation the Persian envoys take to him about the Table of the Sun. Herodotus recognizes the true nature of the Table, but the Persian envoys probably do not. Cambyses' foolishness is, of course, not confined to this episode, but inasmuch as he has been misled by the incomplete report of the Icthyophagoi and seduced into believing that all of Aithiopia is a land of natural abundance, the famine his troops suffer results from his misplaced confidence in the Aithiopian diet.[22] For this reason, Cambyses' army's decline and the Aithiopian king's discourse on diet must be read in conversation with one another. The Aithiopian king has made an argument for a meat-based diet over a bread-based one. Cambyses' army's fate, however, especially read in conjunction with Xerxes' army's

decline in book 8, places a strong limit on this advice. Readers who look back on book 3 in light of book 8 might conclude that meat-based diets are too risky to be attempted. They can lead not only to illness, but also cannibalism, the confusion of appropriate and inappropriate "meats".[23]

An army marching on foraged foods is not going to get very far, as Herodotus' readers probably knew, even if they might not have known that human beings cannot digest grass and bark (as *On Ancient Medicine* implies). However, when read in concert with the Aithiopian-Persian exchange in book 3, these famine narratives activate readers' questions about the different diets that are explicitly discussed by the Aithiopian king. Readers who, after encountering the Aithiopian criticism of Persian bread, wonder whether agricultural foods might not be best for their health and longevity, are perhaps comforted by the fate of Cambyses' and then Xerxes' armies.

This scene may convince readers that a nonagricultural diet is appropriate for some peoples but not others, those who are native to a region but not those who invade it. At the very least, these famine narratives can lead readers to question the Aithiopian king's assertion about the connection between agricultural products and ill health, especially when Herodotus' revelation about the deception behind the Table of the Sun has primed them to mistrust the king.

The fact that the Aithiopian king approves of the gift of Persian wine complicates this set of passages further. The Aithiopian king elevates milk and meat over bread, but admits that wine has ameliorated the Persians' otherwise poor diet: "The Aithiopian said that if they ate shit it was no wonder they lived so few years; for they would not be able to live even that long if they didn't sustain themselves with this drink [indicating to the Icthyophagoi the wine]: for in this they had been beaten by the Persians." Bread is definitely bad for one's health, but wine is not; it is in fact conducive to health. The Aithiopes' appreciation for Persian wine is an ethnographic trope, but also, as James Romm points out, evokes the Cyclopes of *Odyssey* 9 in particular.[24] Like the Aithiopes, the Cyclopes are nonagricultural pastoralists, and like them they too have a fondness for wine. But the reference to *Odyssey* 9 is more troubling than it may first appear. Readers who have the Polyphemus episode in mind will remember the juxtaposition of pastoralism and cannibalism in Homer's text—Polyphemus washing down Odysseus' men with milk (9.296–7)—before the Cyclops is "beaten" by Odysseus's gift of wine (9.347ff.). Whether or not the Homeric passage has provided Herodotus with an explicit model in the Aithiopian episode, the parallels between the two further undermine the Aithiopian king's advice, or at least how to apply it. The episode opposes pastoral and agricultural diets through the comparison of bread and meat (and milk), and then complicates this opposition with the Aithiopes' and Persians' shared appreciation for wine. The Aithiopian king's concession that wine is a true pleasure—and even a healthful one—underlines his denigration of bread, but it means that neither he nor the reader can place agricultural *bios* entirely beneath pastoral *bios*. The *Histories* draws attention to the problems with agriculture but does not adjudicate between *bioi* or advocate consistently for one over the other.

In cultural histories, works like *On Ancient Medicine*, *Works and Days*, and the *Life of Greece*, the writer's philosophy of progress is consistent and unified. But different episodes of Herodotus' *Histories*, and even different aspects of the same episode, echo different philosophies of human progress simultaneously. As I argue in the following section, Agatharchides' *On the Red Sea* is ambivalent about human progress as well.

Agatharchides' *On the Erythraean Sea*: fish vs. locusts

Agatharchides' second-century BCE work *On the Erythraean Sea*, like Dicaearchus' works, has been lost to us in its original form, but Diodorus Siculus, the first-century BCE writer of

universal history, relies on him heavily.[25] In Agatharchides, we meet the Icthyophagoi, or "Fish Eaters," again, this time themselves the ethnographic subject.[26] The Fish Eaters are in fact not a single people and Agatharchides begins, in Diodorus' telling, with those who live right along the coast of the Red Sea. The Fish Eaters, as their name implies, generally eat fish and only fish, and though they must take trouble to prepare their food and occasionally turn to mussels instead, they never go hungry. In the general course of events, the ocean brings to shore every day and even twice a day, an *apiston plēthos pantoiōn ichthyōn* "an unbelievable abundance of every sort of fish" (F 32b = DS 3.15.4). The "unbelievable abundance of every sort of fish" the Fish Eaters gather verbally echoes the Aithiopes' meadow "quite full of boiled meats of every sort of quadruped" in Herodotus (3.18), discussed above. Unlike Herodotus' Aithiopes, Agatharchides' Fish Eaters must gather their food themselves, but the abundance of their food supply associates their lifestyle with the life under Cronus that Dicaearchus describes. Agatharchides concludes his description of these Fish Eaters (F 39b = DS 3.17.5): "Thus, the people who inhabit the coast between the straits live in this way. Because of the simplicity [*haplotēs*] of their diet they rarely fall ill, but they are much shorter-lived than we are."

Agatharchides attributes the good health of the Fish Eaters to the *haplotēs* of their diet, its "simplicity," or "singleness." They eat a simple, unrefined food, and only one kind of it. This simplicity is paralleled in the diet of Dicaearchus' earliest Greeks, who are said to eat food that, though unspecified, must be kept simple, *litos*, by humanity's ignorance of art in general and agriculture in particular.

Agatharchides' Fish Eaters are, however, not quite exempla of well-being. Their simplicity of diet wards off illness, but they are not as long-lived as "we" Greeks are, Agatharchides says, or as Herodotus' long-lived Aithiopes are. Like the Aithiopes whose diet seems spontaneous but is not, the Fish Eaters' diet is abundant and healthy, but only up to a point. Agatharchides does not say why the Fish Eaters die young in Diodorus' telling, though Photius, a later transmitter of Agatharchides, blames a lack of toil (F 39a = Phot. *Bibl*. Cod. 250.40, 450a): "Because of the *haplotēs* of their diet they succumb to few diseases, but they are deprived of years of life inasmuch as they maintain a way of life that is less arduous than others." Whatever the reason, this disjunction between the Fish Eaters' good health and short lives, between what the simplicity of their diet achieves for them and what it fails to achieve, associates the Fish Eaters with the golden age and at the same time distances them from this ideal.

On Photius' reading of Agatharchides, it is possible to maintain the link between the simplicity of the Fish Eaters' diet and good health, and to quarantine their short life span as a result of their idleness, though this too may ultimately be seen as an effect of their overly abundant source of food. Later in Diodorus' telling, Agatharchides offers a much clearer counter-argument to simplicity of diet as a promoter of health. The Locust Eaters, who live on the border of the desert west of Agatharchides' Fish Eaters and Aithiopes, eat only locusts, just as the Fish Eaters eat only fish (F 59b = DS 3.29.1–2): "For in the springtime in their land, powerful west winds drive out from the desert an unspeakable multitude of locusts, distinct for their size and with ugly, dirty-colored wings. From this source they have abundant food for their whole life."

Like the Fish Eaters, who enjoy an "unbelievable abundance of every sort of fish," the Locust Eaters feast on an "unspeakable multitude of locusts." But the Locust Eaters die from a most terrible disease, eaten from the inside out by *pterotoi phtheires*, "winged worms" or "lice" (F 59b = DS 3.29.7): "With such a dissolution of their bodies these people bring their lives to an unhappy end, happening upon such a reversal either because of the peculiarity [*idiotēs*] of their food or the air."

This illness, which seems to be the universal cause of death among the Locust Eaters, Agatharchides attributes either to bad air or to the "peculiarity" of their diet. Although he is uncertain of the cause, the fact that the Locust Eaters, who depend on insects, themselves die as nourishment for other insects seems to point to their diet as the culprit; the association at least casts a pall over what they eat. In any case, inasmuch as their diet is a source of their illness, Agatharchides places a limit on the effectiveness of the simplicity of diet. A food can be very simple, singular, and nonagricultural, like the locust, but still inappropriate for human consumption.

With the exception of *On Ancient Medicine*, all of the texts I have examined associate health with the nonagricultural diets of earlier times and distant places, even if that association is sometimes qualified. In Dicaearchus, relative health is located at the edges of time, when humans did not know about agriculture, and in Herodotus and Agatharchides at the edges of the earth, places where some people have not adopted agriculture. The healthy foodstuff in these texts varies from naturally occurring vegetation in Dicaearchus to meat and milk in Herodotus and fish and fish alone in Agatharchides, and varies also in what makes them healthy. Whereas Herodotus' Aithiopes attribute their health to a meat-based diet rather than a bread-based one, Dicaearchus and Agatharchides attribute health as much to the absence of *technē*, expressed in Dicaearchus by the adjective *litos* and in Agatharchides by the adjective *litos* and the noun *haplotēs*, as to a particular foodstuff. The ethnographies also helpfully outline failed diets, placing explicit limits on the simplicity of healthy eating. The question then becomes: what argument do these texts make to their Greek readers? If agricultural food can cause illness, do these texts suggest that Greeks should abandon agriculture or at least agriculturally produced foods, that they should no longer be "eaters of bread"? Does it matter that the healthy diets of the ethnic Others I have examined are somewhat compromised, by the Aithiopian king's participation in the deception of his people, in Herodotus, and the short lifespan of the Fish Eaters, in Agatharchides?

The ecology of health and environmental determinism

My discussion thus far has analyzed Dicaearchus, Hippocrates, Herodotus, and Agatharchides without much attention to genre. This has revealed larger patterns that in some cases associate nonagricultural foods with spontaneous abundance and health, and in others associate them with illness and death, regardless of whether modern scholars classify the text in question as cultural history (Dicaearchus), history of medicine (the Hippocratic *On Ancient Medicine*), or ethnography (Herodotus and Agatharchides). This connection between health, diet, and ecology constitutes a discourse that transcends modern genre constructions. In her study of Herodotus and the Hippocratic corpus, Rosalind Thomas (2000) has demonstrated that medical and ethnographic texts in the fifth century BCE show evidence of having influenced one another. Cultural histories should be added to this mix.

Attending to chronology can illuminate how this discourse developed over time.[27] While Dicaearchus could not have influenced Herodotus and most of the Hippocratic corpus, I suggest that Dicaearchus' text was influenced by them—not only by the Hippocratic corpus, as others have argued, but by ethnographic texts as well. Nor was this influence unidirectional. As Stanley Burstein has observed, Dicaearchus' cultural history went on to influence Agatharchides' later ethnography.[28] Agatharchides, like many Hellenistic ethnographers,[29] is himself indebted to Herodotus and thus participates in this web of influence twice, through the ethnographic tradition and via Dicaearchus. I would like to call this web "the ecology of health," an extension of Thomas' term, "the ethnography of health," which she uses to

describe the way that both ethnographic and medical writers use ethnic Others to think through medical theory.

Understanding cultural histories as a part of the Greek discourse about health and difference reveals the complexity of Greek environmental thinking. In the ecology of health, diet is not something that humans usually manipulate at will, nor is it represented as something they suffer passively, like climate. Rather, diet is correlated with certain modes of subsistence, automatic, pastoral, or agricultural, and these modes of subsistence themselves imply different ecological arrangements between humans and the rest of nature. In the ecology of health, ethnographic accounts are not only a place for Greek writers to think through medical theories and vice versa (as they are in Thomas' "ethnography of health"), but they and cultural histories are modes of writing in which Greek writers theorize how the environment in which humans live and the way human relate to that environment affect human health.

The ecologies that affect human health are imagined in a variety of ways, from Dicaearchus' four *bioi* to dependence on a single animal or insect in Agatharchides, but diet is always imagined as part of a larger life-system. In most of the texts I have discussed, the central contrast among these systems is between simplicity and refinement, with refinement often identified with cereal culture. In Dicaearchus and the Hippocratic corpus, which are chronologically oriented, earlier humans consume nonagricultural foods while later ones consume the products of agriculture. Even though Dicaearchus and the Hippocratic writers imagine different health outcomes for later, agricultural humans, they both make agriculture the turning point of health and emphasize agriculture as a process, a *technē*, as much as a product. Writers who are geographically oriented locate agriculture and its absence in certain places rather than in certain times, but the contrast between agricultural foods and nonagricultural foods still operates. When Agatharchides characterizes the Fisheater diet as "simple," *litos*, he echoes the *Life of Greece*, which uses the same word to describe the earliest Greek *bios*, and, like Dicaearchus, connects "simplicity" of diet, nonagricultural diet, and good health.

The encounter Herodotus stages between the Aithiopian king and the Persian delegation is slightly different. While the Aithiopian king clearly distinguishes between his own meat-and-milk diet and the Persian diet of bread, he does not reject agricultural *technē* outright. His appreciation of Persian wine, which has presumably resulted from cultivated fruits, is significant. He does not reject agriculture *in toto* but bread in particular, and argues that a meat-based diet is more healthful. Through the Table of the Sun, this meat-based diet is associated with what is imagined to have been the Greeks' first, spontaneous way of life, but the Aithiopian king stresses product rather than process; readers can assimilate the Aithiopes to an earlier stage of Greek life, but neither Herodotus nor the Aithiopes make this connection explicit. Nevertheless, the Aithiopian king's criticism of Persian civilization is not confined to diet alone. He also rejects the dyed cloth, incense, and golden jewelry the Icthyophagoi have brought as gifts (3.21). The Aithiopian king cannot help admiring Persian wine, but it is the one aspect of Persian life that he considers superior to his own people's. In general, he rejects the superfluities of Persian civilization in preference to his own way of life. He singles out bread as the cause of the Persians' relatively short lifespan, but makes it clear that he would not adopt Persian customs even if the Persians and Aithiopes ate the same diet. Although Herodotus emphasizes agricultural product over agricultural process, agricultural products cannot be entirely isolated from the life systems in which they are embedded. The fact that the Persians rely on bread is connected to the way they clothe, adorn, and feed themselves, how they worship, and the natural resources they use in the process.

In general, there is one important way in which ethnographic accounts differ from others that investigate the connection between ecology and health. Above, I discussed the two main

Greek views of human progress, one which celebrates *technē* and the other which does not. Herodotus' and Agatharchides' descriptions of distant diets resemble this scheme for evaluating the diets of distant times, but, perhaps surprisingly, do not adopt a single 'pessimistic' or 'progressivist' philosophy. In both writers' ethnographic descriptions, nonagriculturalism can have a positive or negative outcome, or both. While Herodotus' Aithiopian king prefers meat and milk to bread, the famine narratives that follow this episode explain health and illness differently, and cast doubt on the Aithiopian diet. In Agatharchides, health is associated first with a "simple" and nonagricultural diet of fish, and later with the avoidance of another simple and uncultivated diet, locusts. This ambivalence manifests within episodes as well as across them. Herodotus' Aithiopes emphasize their diet in explaining their longevity to the Persian delegation of Icthyophagoi, but then show them a spring that Herodotus claims is the real reason for Aithiopian longevity (Hdt. *Hist.* 3.23.9): "If this water is as it is said to be, making such use of it would be the reason why [the Aithiopes] are long-lived." The Locust Eaters' illness in Agatharchides also receives a double explanation. They grow ill and die "either because of the peculiarity of their food or the air" (F 59b = DS 3.29.7), as we saw above. The dual or competing explanations that both authors provide are part of a larger phenomenon in ethnographic writing.[30] Whereas cultural histories like the *Life of Greece* and the passage of *On Ancient Medicine* examined above advocate unequivocally for a pessimistic or progressivist view of human development, the ethnographies remain polyvocal and ambivalent about agriculture, and this changes how readers respond to their claims about how diet affects health.

In his criticism of the Persian diet, the Aithiopian king implicitly assumes that the Persians could change their diet if they so wished. In as much as health depends on diet, bread-eaters like the Persians can choose to eat milk and meat. But if Aithiopian health is just as much about a magic spring as their consumption of nonagricultural food, there is not much that the Persians can do to achieve their level of health. In Agatharchides, a similar problem arises. If the Locust Eaters sicken and die because they eat peculiar food, readers looking for healthy diets know that they should not eat locusts when looking for a "simple" diet. But if the Locust Eaters die because of the air they breathe, diet is no longer a guarantee of health, and the health-seeking reader is left wondering: should I eat unrefined foods, or not? Am I doomed to ill health because of my climate, or can I control my physical well-being by eating differently?

The health of Agatharchides' Fish Eaters is not explained in multiple ways, but the fact that they are short-lived is significant. As we saw above, "because of the simplicity of their diet [the Fish Eaters] rarely fall ill, but they are much shorter-lived than we are," (Agatharch. F 39b = DS 3.17.5). This short lifespan may be the result of the immoderateness of their eating and drinking cycle,[31] or the fact that they do not toil, as Photius argues,[32] but the end result is that readers cannot have complete confidence in the Fish Eaters' diet. Although not denigrated as "peculiar," the "simplicity" of this diet does not appear entirely attractive, in large part because Agatharchides' statements about the Fish Eaters' health and short lifespan stand side by side. The Fish Eaters' short lifespan may not be the result of their diet, but Agatharchides does not say for sure and the reader is invited to associate diet with both good health in the short term and a short life in the long term.

Like the double explanations that account for the Locust Eaters' illness and the Aithiopes' health, the conflict between the Fish Eaters' good health and short life represents these ethnographers' engagement with a type of inquiry and method of argumentation that multiplies explanations. These doubled and absent explanations are more than a curious feature of ethnographic reasoning; they also shape how readers will evaluate the advisability of adopting other diets and engaging in other ecologies. In the case of the Aithiopes and Locust Eaters, diet is contrasted with a specific environmental factor (the Aithiopian

spring; the bad air in the land of the Locust Eaters) that would be difficult for a reader to replicate. Compared to these environmental factors, diet may seem more abstractable from environment and adoptable by readers who encounter the diets of geographically distant Others. But the environmental factors themselves are so specific that, if they cast doubt on whether diet or environment leads to certain health outcomes, readers may conclude that the health of ethnic Others is unavailable to them. In ethnographies, the ecologies that produce health are very difficult to determine. Human actions, including the *bios* humans adopt, make a difference, but environmental factors beyond human control continue to assert themselves.

Readers' doubts about these specific diets in Herodotus and Agatharchides are amplified by the fact that these authors present peoples whose lives support both a pessimistic and progressivist view of agriculture. Even if a reader reaches a conclusion about the Aithiopian diet in Herodotus, the famines that the Persian troops suffer present an alternative evaluation of nonagricultural diet. The same is true for readers of Agatharchides, who encounter both Fish Eaters and Locust Eaters. Not only is the healthiness of these peoples' individual diets uncertain, so is the advisability of adopting an agricultural or nonagricultural diet in general. Readers may choose to focus on one strain of thinking, either progressive or pessimistic, and order their lives accordingly, but they must actively ignore the other strain to do so.

The *Life of Greece* and *On Ancient Medicine* do not present the same problems for readers. In these texts, a single either pessimistic or progressivist view of nonagricultural foods is advanced and this diet is tied either to health in the former or illness in the latter. Eating the right foods or foods produced in the right way ensures good health without the complications of multiple explanations or environmental factors beyond human control. Health or illness is diet-dependent but it is not dependent on a certain climate or place. This is reflected in the universalizing features of time-bound rather than place-bound imaginings of nonagricultural ways of life. Although ostensibly about the Greek way of life, the *Life of Greece* describes the earliest lifestyle of human beings at large, as does *On Ancient Medicine.* This universalizing ties these texts to Hesiod's *Works and Days*, which Dicaearchus self-consciously adapts. Although comprised of metallic *genē*, "races" rather than ages, as we tend to speak of them, Hesiod's *genē,* with the exception of the demigods, populate the entire earth in turn. This universalizing releases health from the specific environmental factors of climate and place.

However, health in the *Life of Greece* and *On Ancient Medicine* remains strongly tied to certain time-bound ecologies. In Dicaearchus, the best *bios* is associated with a god, Cronus, whose time has certainly passed and with the absence of a *technē*, agriculture, which present-day Greeks have indubitably acquired. For Dicaearchus, *bios* is both a temporal category that describes different stages of human development and an atemporal "way of life" that can be abstracted from the stream of time and, at least theoretically, adopted by people at any time. The succession of *bioi* Dicaearchus describes, each one replacing the other in turn, points to the first, temporal meaning of *bios*, while the connections he draws between the health of the earliest *bios* and the advice of contemporary physicians points to the possibility for the second. But the fact that the diet of the earliest, healthiest Greeks depends on humans' ignorance of the art of agriculture makes it difficult to experience this historical *bios* in subsequent times, including the time of Dicaearchus' third-century BCE readers; how does one unlearn agriculture? In this sense, the first *bios* and its attributes are indeed lost. In *On Ancient Medicine*, health is also time-bound, but bound to the present and to the *technē* of agriculture, which is available to *On Ancient Medicine*'s Greek readers. In progressivist texts like *On Ancient Medicine*, health is more attainable than in pessimistic texts like the *Life of Greece* that connect health to a lost golden age.

In Dicaearchus' *Life of Greece*, good health belongs definitively to a lost, pre-agricultural past. In Herodotus' and Agatharchides' ethnographies, aspects of that past live on in other places. Like Hesiod's demigods who survive at the ends of the earth (*Op.* 170–73), some ethnic Others eat nonagricultural diets which spring, if not entirely spontaneously, then at least abundantly and without refinement from the earth and sea. Nevertheless, the tendency of ethnographic texts to omit or provide double explanations makes it impossible for readers to gauge the degree to which environmental factors, rather than diet, determine the health of these "golden" *genē*. Ethnographic texts tease their readers, first offering a path to golden-age blessedness and then withdrawing it by tying good health to environmental factors that lie outside human control.

In the ecology of health, temporal and geographic distances play a crucial role. Both types of distance encourage the imagining of alternative ways of being, including being in a particular environment. Distance provides the freedom to imagine alternatives, but it also frustrates Greek readers' application of those alternatives. The health-giving or health-preventing characteristics of past times and distant places are to some degree specific to those times and places, and are to that same extent forever out of reach.

Postcript: Porphyry's environmental thinking

In the last section I described the temporal and geographic constraints on health in the imagination of Greek classical and Hellenistic writers. When these writers locate health in a developmentally earlier time or distant, environmentally different place, health is difficult for Greek readers to abstract and adopt for themselves. A notable exception to this is the Hippocratic *On Ancient Medicine*, which, because it ties health to agriculture, makes health accessible to its readers, who already practice agriculture. Another interesting exception is Porphyry's third-century CE *On Abstinence*, the cover text for the version of Dicaearchus' *Life of Greece* discussed above. Although Porphyry lies outside the temporal bounds of this study, the logic of *On Abstinence* further illuminates the ecology of health I have described at work in earlier periods.

Porphyry's aim in *On Abstinence* is to convince his friend Firmius Castricius, the work's addressee, to abstain from killing and eating animate beings. Porphyry quotes Dicaearchus at the beginning of the fourth and last book, concluding that the earliest humans' happiness resulted from their abstinence from meat, and that meat-eating went hand in hand with increasing war and injustice (Porph. *Abst.* 4.9). Dicaearchus' life under Cronus was probably vegetarian, it is true, but we have seen how the diet of this earliest phase of human life depended at least as much on abstinence from agriculture as on an accidental vegetarianism. Yet Porphyry elides this fact, collapsing the distinction between the first *bios* and later agriculturalism which Dicaearchus works so hard to establish. The difference between Porphyry and Dicaearchus is made especially clear at the end of *On Abstinence* 3, where Porphyry quotes the same passage of Hesiod's *Works and Days* upon which Dicaearchus based his life under Cronus, but comes to a different conclusion (Porph. *Abst*. 3.27): '"We will imitate the golden race, we will imitate those who have been set free. For Aidōs and Nemesis and Dikē were their friends because they were satisfied with the fruit of the earth, for 'the fruitful land bore for them of its own accord and with great abundance.'"

Like Dicaearchus, Porphyry considers the earliest human beings blessed, and calls for his readers to imitate them. But he reinterprets the significance of their diet. For Dicaearchus, the automatic abundance of the earth has been lost to human beings through pastoralism and the art of agriculture. For Porpyhry, agriculture is precisely how people of his own time and

place can become golden once more. The earth no longer spontaneously produces food for human beings, but Porphyry evokes the spontaneity of the golden race as a promise to his readers: if you, like them, restrict yourselves to vegetarian food, i.e. agriculturally produced crops, you will be as abundantly satisfied as if the earth really were providing for you of its own accord.

Unlike Herodotus and Agatharchides, who associated nomadic and other pastoral diets with the golden age, Porphyry does the opposite. Because flesh-eating, rather than agriculture, is the defining contrast he draws between good and bad diets, these peoples' dependence on meat, however abundant, associates them in Porphyry's thinking with the corrupt present rather than the blessed past. In *On Abstinence* 4, Porphyry holds up a variety of ethnic Others, including Egyptian priests, Ioudaioi, and Indian Brahmans for his readers to imitate, but anticipates the arguments of those who would offer "the customs of Nomads, Troglodytes, or Fish Eaters" in contradiction to his arguments. These peoples, Porphyry says, have been forced to eat meat "from necessity," because their land is unsuitable for tilling, and are as much to be imitated as cannibals (4.21).

Porphyry simultaneously valorizes the pre-agricultural past and the agricultural present rather than opposing them as Dicaearchus and the Hippocratic author does. He harmonizes the past and present by making meat-eating, rather than agriculture, the crucial difference between phases of human development, and by associating the automatic abundance the earth literally produced in the past with the moral abundance he promises to his readers if they stop eating meat. Vegetarianism, as Porphyry imagines it, is limited to certain environments, but can be easily accommodated within the existing and dominant agricultural *bios* of his readers. Some nomadic peoples are environmentally prevented from being satisfied with agricultural products, but the abundant, cultivated earth in which he lives invites his readers to eat bread as the vegetarians they have chosen to become.[33]

Notes

1 See Kennedy and Irby, this volume. See also McCoskey 2012, 46–9 and Isaac 2004, 55–168 for an overview of the history of this theory in classical scholarship and the classical tradition. For a recent discussion of environmental determinism and human agency in *AWP*, see Presti 2012.

2 Thomas 2000, 28–74.

3 In what follows, I contrast agriculture with other modes of subsistence as Greek writers imagine them, including pastoralism and hunter-gathering. Though I explore the difference between agricultural and nonagricultural ecologies, this dichotomy is not a stable, structuralist opposition such as Levi-Strauss's "raw" and "cooked." It is in fact the unstable boundaries between diets that makes their representation so interesting.

4 For Dicaearchus' effect on Roman theories of the past, via Varro, see Purcell 2003.

5 As Ax 2001 and Saunders 2001 demonstrate, the question of Dicaearchus' "primitivism" has not been settled. Although I am comfortable calling his account of Greek history a "decline narrative" and his philosophy "pessimistic," this is not essential for my argument. All one must agree to is that health declines as time proceeds, and that Dicaearchus' text expresses nostalgia for this aspect of the earliest *bios*.

Hesiod calls the fruit of the golden race *automatē* (*Op.* 118). As Hunter 2014, 231–2 observes, it is too easy to equate Hesiod's "automatic" abundance with the absence of agriculture, though this is how later authors (including Dicaearchus) interpret it. Cf. Scodel's *Op.* commentary (Scodel, forthcoming) for a similar argument. See Bianchi 2006, 131 n.11 for other instances of *automat-* in Hesiod and Homer. Dicaearchus' emphasis on spontaneous, "automatic" generation and the absence of *technē* also links this version of the earliest period of Greek history with the *automatos bios* well known from Old Comedy, for which see Ruffell 2001.

6 Saunders 2001, 244. Dicaearch. F56B = Jerome, *Against Jovinian* 2.13 confirms that, in Dicaearchus' *Golden Age,* "*nullum comedisse carnem*."

7 Acorns had a mixed reputation in Archaic, classical, and Hellenistic sources. As food for pigs (e.g. *Od*. 10.242, 13.409; Arist. *HA* 603b 31), their consumption by human beings could carry negative connotations, but they were also associated with the city of peace in Hesiod (*Op.* 233), and the Hippocratic writers recommended them both raw and boiled in different circumstances (*Vict.* 55.28). Theophrastus describes several varieties, some of which are "sweet" and others toxic even to animals (*HP* 3.8.7; see Amigues 2003, 148 for modern species equivalents). As bitter and difficult to process, acorns stood for the undesirable, "primitive" past imagined by progressivists. When "sweet," they stood for the abundant food of the golden age imagined by pessimists. See Dalby 2003, 2.

8 Jouanna 1990a, 85 dates the *VM* to the end of the fifth century. See Jouanna 1992, 523–63 for the dates of all the Hippocratic treatises.

9 Saunders 2001.

10 See Wilkins 2006, especially 123–7.

11 For more on cooking in *On Ancient Medicine*, see Rosen 2015, Totelin 2009, and Schiefsky 2005, 152–60.

12 For this tradition of writing about the deep Greek past, sometimes universalized, see Sikes 1914, Lovejoy and Boas 1935, Cole 1967, Edelstein 1967, and Dodds 1973. For *technē*, see Cuomo 2007, esp. 7–40.

13 On the modern construction of ethnography as a genre, see Hartog 1988, chapter 1; Woolf 2011, 13–19. and Skinner 2012. For the modern concept of "race" as distinct from the ancient (and slippery) concept(s) of ethnicity, see Kennedy, Roy, and Goldman 2013, xiii–xv, and Kennedy this volume, 10–1. Though McCoskey makes a persuasive case for using "race" to describe ancient categories of human difference, I prefer "ethnic Other" as a term that emphasizes the disjunction between ancient and modern racial and ethnic thinking, highlights the constructedness of ancient (and modern) racial and ethnic categories, and pays particular attention to the primary distinction made in ancient sources between "self" and "other." In Greek thinking, an "ethnic Other" is a non-Greek, a human being who is perceived as different from the Greek self in origin, bodily appearance, and/or customs. Ethnic Otherness is to some degree inherited and to some degree performed, and thus can sometimes change.

14 Agatharchides, like Dicaearchus, survives in the citations of later authors. See Burstein 1989 and 2013.

15 I use the Greek transliteration to distinguish these Fish Eaters from those we will encounter later. For the Icthyophagoi as cultural ambassadors, see Longo 1987, 20.

16 Romm 1992, 59.

17 Romm 1992, 57.

18 Finch 2010, 370 suggests that *kopros* is an allusion to manure, and that "the implication that the Persian's bread was dirty because it was made from grain grown in manured soil refers to the common practice to improve crop yield by manuring the soil with dung from domestic animals or human night-soil." While this may be so, I think that we should still take the insult to apply to agriculture in general, rather than a particular agricultural practice.

19 Romm 1992, 59.

20 For the language and tropes of the famine narrative, see Garnsey 1988, 17–31.

21 As Thomas 2000, 39–40 argues, following Demont 1988, Herodotus here makes use of Hippocratic theories about the illness that can result from a change in regimen.

22 Thanks to Matt Newman for observing the parallel with Odysseus' men and the Cyclopes in *Odyssey* 9.

23 Vernant 1979 has noted that the Aithiopes enjoy an idealized version of sacrificial cuisine, in which the ritual killing and cooking has already happened. The fact that Cambyses cannot access this food reinforces the realities of post-Promethean Greek life, in which humans must slaughter animals for sacrifice and cannot afford to eat sacrificial animals regularly. For more on the historiography of Greek sacrifice as well as new considerations, see Naiden 2013.

24 Romm 1992, 57–8 ties the wine in the Aithiopian episode to the Cyclopes in *Odyssey* 9 and Cambyses' later intoxication and madness in the *Histories*. He says: "Alcohol can be a medicinal beverage to the Ethiopians because, in their golden-age innocence, they do not crave it immoderately; only for 'advanced' races like the Persians does it pose a hazardous temptation." For an alternative reading of this passage, see Vernant 1979. For wine in ethnography, see Lenfant 2002. Mash 2010, 109 points out that the wine, being *phoinikēiou* (3.20), may imply a further joke: if the wine is not just palm wine, but Phoenician, the Persian's best gift is not even really Persian!

25 Photius, the ninth-century Byzantine scholar, also transmits Agatharchides.

26 Although Herodotus' and Agatharchides' *Icthyophagoi* are lexically identical, I will call the people in Agatharchides "Fish Eaters" to distinguish them for the reader.

27 For an overview of Archaic and classical ideas preceding those in this chapter, see Kennedy, this volume.
28 Burstein 1989, 26–7.
29 Murray 1972, Priestley 2014.
30 Woolf 2011, 32ff.
31 Agatharch. F 39b = DS 3.17.5.
32 Agatharch. F 39a = Phot. *Bibl. Cod.* 250.39, 450a.
33 My great thanks to Francesca Schironi, Ruth Scodel, Ian Moyer, Paolo Asso, Ralph Rosen, and the UM Classics Dissertation Workshop for their encouragement and advice.

Bibliography

Ax, Wolfram. 2001. "Dikaiarchs Bios Hellados und Varros De Vita Populi Romani." In *Dicaearchus of Messana*, edited by William W. Fortenbaugh and Eckart Schütrumpf, 279–310. New Brunswick, NJ: Transaction.

Bianchi, Emma. 2006. "Material Vicissitudes and Technical Wonders: The Ambiguous Figure of *Automaton* in Aristotle's Metaphysics of Sexual Difference." *Epoché* 11: 109–39.

Burstein, Stanley. trans. 1989. *Agatharchides of Cnidus. On the Erythraean Sea*. The Hakluyt Society, Second Series 172. London: Hakluyt Society.

——. 2013. "Agatharchides of Knidos (86)." In *Brill's New Jacoby*, edited by Ian Worthington. Leiden: Brill Online.

Cole, Thomas. 1967. *Democritus and the Sources of Greek Anthropology*. Cleveland, OH: American Philosophical Association.

Cuomo, Serafina. 2007. *Technology and Culture in Greek and Roman Antiquity*. Cambridge: Cambridge University Press.

Dalby, Andrew. 2003. *Food in the Ancient World from A to Z*. London: Routledge.

Demont, Paul. 1988. "Hérodote et les Pestilences." *Revue Philologique* 62: 7–13.

Dodds, Eric R. 1973. *The Ancient Concept of Progress and Other Essays on Greek Literature and Belief*. Oxford: Oxford University Press.

Edelstein, Ludwig. 1967. *The Idea of Progress in Classical Antiquity*. Baltimore, MD: Johns Hopkins University Press.

Finch, Caleb. 2010. "Evolving Views of Ageing and Longevity from Homer to Hippocrates." *Greece and Rome* 57: 355–77.

Fortenbaugh, William W. and Eckart Schutrumpf, eds. 2001. *Dicaearchus of Messana*. New Brunswick, NJ: Transaction.

Garnsey, Peter. 1988. *Famine and Food Supply in the Graeco-Roman World*. Cambridge: Cambridge University Press.

Hartog, Francois. 1988. *The Mirror of Herodotus: The Representation of the Other in the Writing of History*. Berkeley: University of California Press.

Hunter, Richard. 2014. *Hesiodic Voices*. Cambridge: Cambridge University Press.

Isaac, Benjamin. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.

Jouanna, Jacques. 1990a. *Hippocrate, vol. 2, part 1, Ancienne Médecine*, Paris: Les Belles-Lettres.

——. 1990b. "La Maladie Comme Agression dans la Collection Hippocratique et la Tragédie Grecque." In *La Maladie et les Maladies dans la Collection Hippocratique*, edited by Paul Potter, Gilles Maloney, and Jacques Desautels, 39–60. Quebec: Editions du Sphinx.

——. 1992. *Hippocrate*. Paris: Fayard.

Kennedy, Rebecca Futo, C. Sydnor Roy and Max L. Goldman. 2013. *Race and Ethnicity in the Classical World: An Anthology of Primary Sources in Translation*. Indianapolis, IN and Cambridge: Hackett Publishing.

Lenfant, Dominique. 2002. "Le Vin dans les Stéréotypes Ethniques des Grecs (Du Rôle de la Norme en Ethnographie)." In *Vin et Santé en Grèce Ancienne*, edited by J. Jouanna and L. Villard, 67–84. *Bulletin de Corresponance Hellénique* Supp. 40.

Longo, Oddone. 1987. "I mangiatori di pesci: regime alimentare e quadro culturale." *Materiali e discussioni per l'analisi dei testi classici* 18: 9–55.

Lovejoy, Arthur O. and George Boas. 1935. *Primitivism and Related Ideas in Antiquity*. Baltimore, MD: Johns Hopkins University Press.

Mash, Mark. 2010. *Humor and Ethnography in Herodotus' Histories*. PhD dissertation, University of North Carolina at Chapel Hill.
McCoskey, Denise. 2012. *Race: Antiquity and its Legacy.* New York: IB Tauris.
Murray, Oswyn. 1972. "Herodotus and Hellenistic Culture." *Classical Quarterly* New Series 22: 200–213.
Naiden, Fred S. 2013. *Smoke Signals for the Gods*. Oxford: Oxford University Press.
Presti, Roberto L. 2012. "Shaping the Difference: The Medical Inquiry into the Nature of Places and the Early Birth of Anthropology in the Hippocratic Treatise *Airs Waters Places*." In *Medicine and Space: Body, Surroundings and Borders in Antiquity and the Middle Ages*, edited by Baker, Patricia, Han Nijdam, and Karine van't Land, 169–96. Leiden: Brill.
Priestly, Jessica. 2014. *Herodotus and Hellenistic Culture*. Oxford: Oxford University Press.
Purcell, Nicholas. 2003. "The Way We Used to Eat: Diet, Community, and History at Rome." *American Journal of Philology* 124(3) (Autumn): 329–58.
Romm, James. 1992. *The Edges of the World in Ancient Thought.* Princeton, NJ: Princeton University Press.
Rosen, Ralph. 2015. "Towards a Hippocratic Anthropology: On Ancient Medicine and the Origins of Humans." In *Proceedings of the XIIIth Hippocratic Colloquium*, eds. Lesley Dean Jones and Ralph M. Rosen. Leiden: Brill
Ruffell, Ian. 2001. "The World Turned Upside Down: Utopia and Utopianism in the Fragments of Old Comedy." In *The Rivals of Aristophanes*, edited by David Harvey and and John Wilkins, 473–506. London: Duckworth.
Saunders, Trevor J. 2001. "Dicaearchus' Historical Anthropology." In *Dicaearchus of Messana*, edited by William W. Fortenbaugh and Eckart Schütrumpf, 237–54. New Brunswick, NJ: Transaction: 2001.
Schiefsky, Mark. 2005. *Hippocrates on Ancient Medicine*, transl. with introd. and commentary. Leiden: Brill.
Scodel, Ruth. Forthcoming. *Commentary on Hesiod*. Cambridge: Cambridge University Press.
Sikes, Edward. 1914. *The Anthropology of the Greeks.* London: D. Nutt.
Skinner, Joseph. 2012. *The Invention of Greek Ethnography*. Oxford: Oxford University Press.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science and the Art of Persuasion*. Cambridge: Cambridge University Press.
Totelin, Laurence M.V. 2009. *Hippocratic Recipes: Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece.* Leiden: E.J. Brill.
Vernant, Jean-Pierre. 1979. "Food in the Countries of the Sun." In *The Cuisine of Sacrifice among the Greeks*, edited by Marcel Detienne and J.-P.Vernant, 164–9. Chicago, IL: University of Chicago Press.
Wilkins, John. 2006. "The Social and Intellectual Context of *Regimen II*." In *Hippocrates in Context*, edited by Philip J. van der Eijk, 121–33 Leiden: Brill.
Woolf, Greg. 2011. *Tales of the Barbarians*. Malden: Wiley-Blackwell.

3

THE INVENTION AND APPLICATION OF ETHNIC DEFORMITY

Robert Garland

Gender- and status-oriented stereotyping infected the ancient mind just as it does the modern, sometimes claiming, as today, a pseudo-scientific credibility. Aristotle, for instance, lent his considerable authority to the belief that men exemplified physical perfection while women represented "the first step along the road to deformity" (*GA* 4.767b 7–8). He also subscribed to the belief that slaves by nature (to be differentiated from slaves by law, i.e. those who became enslaved by circumstance) were 'naturally' deformed, claiming "It is nature's intention to differentiate physically between the bodies of free men and those of slaves by rendering the latter capable of performing menial tasks and the former upright and unsuited for such work but adapted to civic life" (*Pol.* 1.1254b 27–31)—a classic instance of mistaking cause for effect that had the 'beneficial' consequence of justifying the existence of a servile class.

This much is well known. But what about ethnic deformity—the notion (not entirely fallacious) that certain sub-divisions of the human species are genetically different from the dominant group, in some cases markedly so? What kind of stereotyping did that give rise to? This chapter will examine how the Greeks and the Romans attributed abnormal physiological characteristics, and sometimes, too, behavioural oddities, to what we would identify as imaginary, fabulous, or monstrous peoples. It will also examine how the concept of ethnic deformity originated and evolved throughout classical antiquity, both in scientific circles and in the popular imagination, from the seventh century BCE to the second century CE, and the uses to which it was put: diversionary, educational, or satirical. The subject is large, and I shall offer only a broad survey, which, I hope, will establish some parameters for an intellectual history of ethnic deformity in classical antiquity.

By way of introduction, we should note that belief in deformed peoples was not the exclusive preserve of the uninformed and uneducated. On the contrary, it was endorsed by both Greek and Roman intellectuals, including those with scientific pretensions, such as Empedocles, Lucretius, and Pliny. Other luminaries, however, such as Strabo, Aulus Gellius, and Lucian, rejected the concept out of hand. It goes without saying that 'deformity' is a relativist notion which often bears the stain of prejudice and which some scholars now reject in favour of 'disparity'.[1] I will endeavour to apply the word here with an awareness of its inadequacy as an objective term of reference.

I am aware, too, that in employing the term 'ethnic', I am straying into a linguistic minefield.[2] Both 'ethnic', 'ethnic group', and 'ethnicity' are contested terms in sociological theory that are applied to differences, whether cultural, physiological, or linguistic, which are sometimes

perceived as real and profound, and sometimes as socially constructed. Words like 'race' and 'nation' are equally problematic and less applicable to the ancient world.[3]

Similar problems beset us when we turn to the ancient world. In Greek *ethnos*, *phulē*, and *genos* are often used indiscriminately to denote such varied identifications as 'race', 'people', 'clan', 'tribe', 'kin group', or 'community linked by blood', as in Latin are *natio*, *populus*, and *gens*. So when, for instance, in the *Theogony* (l. 591) Hesiod states bluntly that "From Pandora come the baleful kin group (*genos*) and tribe (*phula*) of women", are we to infer that women are biologically related to Pandora and thus constitute a morally depraved species (as we would term it) distinct from their male counterparts or merely that they are temperamentally akin to Pandora? In other words, is he speaking metaphorically? Or is the concept of kinship so muddied in this context that this question has no real relevance?[4]

Before investigating the invention of ethnic deformity, we need to look briefly at the origins of ethnicity in the sense in which the term implies varieties of humankind. It is commonly believed that it was the overseas settlement movement, the origins of which belong to the second half of the eighth century, that had a decisive influence on Hellenic consciousness and stimulated the Greeks to develop and deepen their sense of collective identity. This stimulus, the argument goes, came about as the result of their encounter with the non-Greek indigenous peoples in whose lands they settled, such as the Iapyges and Oinotroi of Italy, and the Elymoi, Sikanoi, and Sikeloi of Sicily, since, as Jonathan Hall has emphasised, "Ethnicity can only be constituted in opposition to other ethnic identities."[5] In support of this theory it has been pointed out that the designation *Hellēnes*, which we translate as 'Greeks', appears only once in the *Iliad* (2.681–5), and then in a limited geographical sense to indicate those peoples who inhabited the region that lay to the south of Thessaly. It is not until the end of the sixth century that Hecataeus of Miletus used *Hellēnes* to designate the entire population of Greece (1 *FGrH* 119).[6]

Scholars often assume that the overriding factor in Greek self-definition was linguistic. In so doing, they follow the etymological lead of Strabo (14.2.28), who claimed that *barbaros* is an onomatopoeic term which replicates the incomprehensible utterances of non-Greek speakers. Its earliest attestation is in the *Iliad*, where it appears in the form of a compound adjective, viz. *barbarophonoi* ("of barbarous speech"), which Homer applies to the Carians (2.867). The problem with this argument is that the Carians were hardly the most outlandish of the peoples with whom the Greeks came into contact, as Hall has pointed out.[7] It may be that *barbarophonos* signifies those who spoke Greek poorly or with a thick accent. By contrast the term 'Roman' seems from early on to have had strong political as well as biological overtones, given the fact that those so named were a heterogeneous people, composed in part of the detritus of other, neighbouring communities (Livy 1.8.5).

'Deformity', too, as noted, is a highly problematic concept that assumes a normative physiological standard to which the majority conforms. It tends to carry a stigma that we should not unthinkingly apply to other cultures. Neither the Greeks nor the Romans seem to have regarded the headless, the dog-headed, or the mouthless as deformed in the way in which the term tends to be used; rather they saw them as either 'incredible' (not necessarily the same thing as 'unbelievable'), 'wonderful', or 'miraculous'. This is more than merely a matter of terminology; it is a way of seeing, of evaluating, and, I might add, of appreciating difference—or disparity. The ones, moreover, who were identified as the *gentium mirabiles figurae*, "the wonderful types of peoples", to borrow Pliny the Elder's universalizing phrase, included not only those whose appearance was out of the ordinary but also those whose behaviour was irregular, such as the Scythian *anthropophagoi*, who exhibited a penchant for human flesh (Hdt. 4.106).[8] In other words, physiological and cultural oddities could and frequently did overlap, with many deformed peoples being abnormal in both categories.[9] The Ethiopians, for

instance, whom Homer variously located either on the shore of the Ocean (*Il*. 23.205) or at the extremities of the world (*Od*. 1.23–4) were disparate not only in height, beauty, and longevity, but also in virtue (Hom. *Il*. 1.423; Hdt. 3.20 and 23; Nicolaus of Damascus F12).[10] Incidentally, it is striking that the only outlandish people whom Herodotus passes judgement upon are the Scythian *anthropophagoi* mentioned above, whom he describes as "having the most savage natures of all peoples, lacking any sense of justice, and observing no laws" (4.106).

We can identify two distinct groups of peoples who were believed to be physiologically abnormal in the ancient world. The first comprises hybrid creatures that are the product of miscegenation between humans and beasts. They include centaurs (half-human, half-horse), Sirens (half-human, half-bird), and the dog-headed *kunokephaloi* (Hdt. 4.191; Aesch. fr. 431; Ctesias *FGrH* 688 F 45.37–43). The second group comprises varieties of humans who exhibit a striking anatomical anomaly: either they lack a vital part or organ, depend primarily upon it, are larger or smaller than the human norm, or have bodies that are constructed differently from the human norm. They include the *astomoi*, who have a hole in their faces instead of mouths, the *blemmuai*, who are headless and have faces on their chests, and the *skiapodes*, who have umbrella-like feet (or possibly one giant foot), which they use as a parasol (or *skia*) to protect themselves from the sun (Hdt. 4.191; Aristoph. *Birds* 1553 with Schol. *ad loc*.; Ctesias *FGrH* 688 F 60; Plut. *Moralia* 938c and 940b; Strab. 2.1.9).

To what extent belief in the existence of ethnic deformity was inspired by encounters with individuals who were afflicted with congenital deformity is uncertain. It has been suggested, for instance, that the *blemmuai* might owe their origin to the foetal malformation known as anencephaly and the Cyclopes to congenital synophthalmia.[11] But while congenital deformity may have played some part in stimulating the imagination, other factors are likely to have been in play. One probable stimulus is the hybrid monsters and beasts with human heads that are depicted in Achaemenid and Mesopotamian art.[12] Another is the desire on the part of travellers to earn credit for themselves by circulating reports of the fabulous peoples whom they observed in faraway places. Yet another, perhaps the most influential factor of all, is encounters with peoples who deviated from the norm, such as those with black skin and *pugmaioi* (our word 'pygmies', literally 'fist-like men'), whose actuality lent credibility to the belief that other aberrant peoples existed in the world. Pliny the Elder, for instance, defended his belief in the reality of fabulous peoples by instancing the Ethiopians, whose dark skin is deemed incredible by those who have not set eyes on them (*HN* 7.1.6).[13] In sum, the disposition to believe in ethnic deformity may well be as old as the human imagination and no doubt has many stimuli. Certainly its origins can be traced as far back as Homer and Hesiod, and there is no reason to suppose that either of them was a pioneer in this regard.[14]

It was the extremities of the known world that were believed to be most productive of ethnic deformity; that is to say, Libya and Ethiopia to the south, India to the east, and Scythia to the north, none of which regions constituted a precisely defined geographical entity. The designation 'India' generally referred to the northwest region of the Indian sub-continent, much of which today lies in Pakistan.[15] Libya and Ethiopia overlapped in different accounts, and Ethiopia was often confused with India. The shores of the all-encircling Ocean were also evoked as a place where outlandishness thrived. All were far distant from the Greek world, a fact that made verification impossible, as some ancient commentators acknowledged. Rarely did writers exercise their minds on what circumstances might have brought about the existence of the ethnically deformed, and in some cases, perhaps as a last resort, a mythological progenitor was sought. Hesiod, for instance, claimed that both the Cyclopes and the pygmies were descended from Poseidon (fr. 150 Merkelbach-West), whereas Hellanicus (*FGrH* 4 F88) traced the Cyclopes back to Uranus. But who was their mother?

Homeric understatement

Odysseus and his companions have several encounters with monstrous peoples in the *Odyssey*, including the one-eyed Cyclopes and the giant Laistrygonians. It is striking, however, that Homer does not attempt to describe their appearance in detail. Rather he employs allusion to evoke their physiological distinctiveness. The Cyclops Polyphemus, for instance, is "a monstrous wonder, not like a bread-eating human being, but like the wooded peak of lofty mountains that stands apart from the rest" (9.190–92). The poet does not mention the fact that Polyphemus possesses only a single eye but leaves us to deduce this from the fact that '*kuklops*' means 'circle-eyed'. A lacto-vegetarian by nature, Polyphemus eats human flesh when it providentially comes his way. All that we learn about the monstrous Laistrygonians—apart from the fact that they, too, are cannibals when the opportunity arises—is that they are as "tall as a mountain" (10.112–13, 116, 124–5).[16]

It is unclear whether the Sirens should be thought of as a distinctive physiological group, since Homer provides no description of them (12.39–46). In art, however, they are frequently depicted as human-headed birds. Scylla with her twelve feet, six heads, and three sets of teeth is pure horror, though seemingly without the capacity to reproduce. In sum, it is a characteristic of Homer's poetics that he eschews the opportunity to elaborate upon physiological oddity, perhaps because he thought it more evocative—and less preposterous—to leave this to his audience's imagination.

The scepticism of Herodotus

Physiological and cultural oddities feature significantly in the ethnographic writings of Herodotus, principally in his account of western Libya in the south and of Scythia in the north, viz. the region between the Carpathian mountains and the River Don. Of the one-eyed Arimaspians, a people who inhabited the lands to the north of the Black Sea, he writes: "I do not believe there can be a people who are born with one eye but who in other respects resemble human beings" (3.116; cf. 4.13 and 27).[17] Hardly surprisingly, in light of this statement, he also categorically denies the existence of a goat-footed people, of whom the Scythian Argippaeoi give report (4.25). Herodotus prefaces his description of the Libyan *kunokephaloi* (dog-headed people) and the *akephaloi* (headless people who have eyes in their chests) with the words "as the Libyans claim . . . along with many other either credible—or 'incredible'—creatures." The translation depends on whether we accept the reading *akatapseusta* in the manuscripts or prefer the emendation *katapseusta* (4.191.4). This is perhaps one of those places where 'incredible' signifies not 'that which cannot be believed' but rather 'that which almost defies belief'.[18]

It is a different matter altogether when we come to the Argippaeoi themselves, of whom he writes:

> These people are allegedly completely bald from birth, both male and female alike, have snub noses, large jaws, speak their own language, dress like other Scythian people, and live off the fruit from trees. Nobody wrongs them for they are said to be sacred and do not possess any weapons of war. In fact they settle disputes for the neighbouring peoples, and if any fugitive seeks refuge among them, that person is safe from injury (4.23).

The Argippaeoi differ from the other peoples Herodotus has mentioned in not being malformed but proportionately irregular. Though he prefaces his description with the word *legomenoi*,

which can be taken to mean either 'allegedly' or, more neutrally, 'as is said', he evidently believes in their existence. Despite their apelike appearance, he does not suggest that they are intellectually challenged or morally degenerate. Rather he leads us to infer that they are more enlightened than other Scythian peoples, and, both in their eschewing of violence and in their hospitality towards asylum-seekers, more enlightened than Greeks.

The limits of the Orientalist impulse

There seems to have been little disposition on the part of Greek poets and historians to construct a negative stereotype of the peoples whom they encountered in the East. Certainly there is no indication in the *Iliad* of any physiological difference between the Greeks and the Trojans. Indeed differences of any kind are hard to perceive, though, as Edith Hall has noted,[19] a handful of epithets, such as *bathukolpos* ('deep bosomed'), which is used exclusively of Greek women, may be suggesting that "the seed of later ethnographical science was germinating". When Priam and Achilles gaze in wonder at each other in Book 24 of the *Iliad*, they do so not as members of different cultures and ethnicities but as individuals whose lives have become enmeshed, as is indicated by the fact that Priam prompts in Achilles the recollection of his father (*ll*. 24.507–11). It is, in other words, their common humanity, not their separate ethnicity, that directs their encounter and provokes their reactions to one another.

Similarly, there is no evidence that the 'invention of the barbarian', to use a conventional term of reference, consequent upon the Persian Wars was fuelled by a belief that the Persians were physiologically distinct or that their culture was inferior to that of the Greeks.[20] No contemporary Greek author suggests that the genetic makeup of the Persians differs in any way from his own. Though Herodotus reports that the Persians had particularly soft skulls, the reason he proposed for this physiological anomaly is that they wore felt caps known as *tiarai* from early childhood onwards. In this way, a cultural practice was able to overcome the environmental impact of the sun, whose heat would otherwise harden their skulls as it did those of the Egyptians (Hdt. 3.12).

There is nothing in Herodotus' account to suggest that the outcome of the Persian Wars owed anything to a cultural, far less to an ethnic, divide, or even that the conflict represented a 'clash of civilizations'.[21] Instead, he presents the wars as a fight for freedom that the Greeks happened to win—rather fortuitously and despite their many deficiencies—against a very worthy adversary. Likewise, there is no evidence of an 'ethnic chasm' between Greeks and Persians in Aeschylus's *Persians*, despite the fact, noted by Gruen, that it is often claimed that the play reflects the beginnings of the essentialist divide between Greeks and barbarians.[22] In short, we search in vain in the literature of the Persian War period for the origins of an incipient 'racist' mentality.[23] This is not to say that the Greeks let the Persians off entirely scot-free. Their effeminacy in particular, which might almost be seen as an inherited trait, was frequently contrasted with the supposed manliness of the Greeks. Overall, however, there is remarkably little evidence to suggest that the Greeks were inclined to construct a negative stereotype of the Persians as a people.[24] The Romans were similar to the Greeks in this respect, even when it came to assessing their most hated foes. Gruen has demonstrated that the slur term *Punica fides* first occurs in Sallust—nearly a century after the destruction of Carthage and, further, that it was a vague rather than strictly 'racist' slur and by no means exclusively applied to the Carthaginians.[25]

Similarly, there is little evidence to suggest that non-white peoples were regarded with disfavour, far less with prejudice, by either the Greeks or the Romans, or that their colour was perceived as a mark of their intellectual, moral, or cultural inferiority. The conclusion seems

to be that black skin, physiological terms, denoted an aberrant ethnic entity who belonged in the same 'fabulous' category as persons with heads in their chests.[26] Neither the Greeks nor the Romans saw themselves as 'white' in the way in which that term is applied in modern western culture. In the absence, therefore, of what Dee calls "the kind of obsessive and corrosive concern with 'whiteness' and 'blackness' that so disfigures our modern world", their classification system rested chiefly on the distinction between other cross-cultural oppositions, principally Greek versus non-Greek, and slave versus free.[27]

The exoticism of India

It was the encounter with India that intensified the interest in fabulous peoples, consistent with Pliny the Elder's claim that "India and parts of Ethiopia are particularly noted for their wonders" (*HN* 7.21). India, located at the 'edge' of the known world, was popularly believed to be inhabited by fantastic beings. The first Greek known to have visited the subcontinent was Scylax of Caryanda, who did so in the early decades of the fifth century BCE.[28] Scylax was commissioned by the Persian king Darius I to explore the course of the Indus River. After accomplishing this task, he sailed westwards through the Red Sea towards modern-day Suez. He later wrote an account of his journey, excerpts of which are quoted both by his contemporary Hecataeus and by later writers (*FGrH* 709 F 1–13).

We are dependent for our knowledge of the content of Scylax's work from a reference in the *Chiliades* of the twelfth-century Byzantine polymath John Tzetzes (7.629–36), who tells us that the peoples whom Scylax described include the *skiapodes* (shadow-feet people), the *ōtoliknoi* (people with ears like winnowing fans), the *monophthalmoi* (one-eyed people), the *enōtikoitoi* (people who sleep in their ears), and the *ektrapeloi* (the freaks). This would make Scylax our earliest source for these fabulous peoples. It is possible, however, that Tzetzes is referring to Pseudo-Scylax, author of a work known as the *Periplous* or "Circumnavigation" dated to the 330s BCE (Hermann in *RE* IA, col. 2496 [1929]; Nichols 2011, 157).

The first person to write a treatise devoted exclusively to India was Ctesias of Cnidus, who flourished in the late fifth/early fourth century BCE. Ctesias served as physician at the court of the Persian king Artaxerxes II in Susa until 398/7 BCE, in which year he returned to Greece and composed accounts of both India and Persia. His *Indika* has survived in excerpts that are preserved in the *Bibliothēka* of Photius, the ninth-century patriarch of Constantinople.[29] Ctesias never visited India, seems not to have consulted any written sources, and relied primarily on oral reports that he received from Indian and Bactrian informants who happened to be passing through Persia while they were either serving on diplomatic missions or selling their wares. His informants may have found it advantageous to suggest that the land they came from was productive of marvels in order to increase the esteem in which they and their products were held, as Nichols suggests.[30]

Ctesias' account of India is far more detailed and rich than that of Herodotus, in whose work the region features only marginally, though he limits himself largely to discussion of the Indus Valley. Romm is of the opinion that Ctesias composed his *Indika* "primarily to entertain rather than inform his Greek audience", though the two objectives are not mutually exclusive.[31] Ctesias' most detailed ethnographic description is accorded to the *kunokephaloi*, who, he claims, are "black like other Indians", but bark and use sign language instead of speech. They perform intercourse on all fours—'doggy style,' as we might appropriately term it—and consider any other method of copulating 'shameful'. Their bestial characteristics notwithstanding, they are commended for being 'just'.[32] They also happen to be the

longest living of any people on earth (*FGrH* 688 F 45. 37–42). In their moral uprightness, the *kunokephaloi* resemble Herodotus' Argippaeoi, whom we discussed earlier.[33]

In the middle of India, the author further relates, live the pygmies "whose penises are so long that they reach to their knees and even lower" (*FGrH* 688 F 45.21). It is unclear whether this attribute implies that pygmies were endowed with enhanced potency, though the possibility cannot be ruled out, since the peoples who lived at the ends of the earth were generally thought to have possessed abnormally powerful constitutions that guaranteed both longevity and resistance to disease (*FGrH* 688 F 45.32; cf. Hdt. 3.23).[34]

Nearly a century later, the historian and diplomat named Megasthenes (c. 350–290 BCE) wrote a three- or four-volume work entitled *Indika* (*FGrH* 715 F 1–34, esp. F 27 [= Strabo 2.1.9]). Unlike Ctesias, whom he refutes on many occasions, Megasthenes acquired first-hand knowledge of northern India, serving as an ambassador to the newly established Mauryan kingdom under Seleucus I Nicator, founder of the Antigonid dynasty. His account, of which only fragments survive, focused on the Ganges and was far more detailed than those of his predecessors. Though he incorporated descriptions of fabulous peoples, including tribes whose girls give birth at six years of age (*FGrH* 715 F 13), he also emphasized the highly positive effects of urbanization on Indian culture and society in general, which intimates perhaps that India was ceasing to be thought of as the homeland *par excellence* of fabulous beasts and peoples.[35] Megasthenes' *Indika* was the main source for Arrian's work of the same name written half a millennium later, and was subsequently used too by both Strabo and Pliny.

The seductive charms of paradoxography

It was the campaigns and conquests of Alexander the Great, particularly his expedition to the Indus Valley in 326–25 BCE, that inspired a genre of literature which was devoted to reports of what lay outside the conventionally known bounds of human experience. Lacking any designation in antiquity, the genre is known today as paradoxography, or 'wonder literature'.[36] This derives from the fact that the writings that go under this name commonly include words like *paradoxos* ('contrary to belief'), *apistos* ('incredible'), and *thaumasios* ('miraculous'), in their titles. Previously reports of marvels had been confined to remote antiquity or featured only marginally in works devoted primarily to other topics as we have seen. Now they occupied centre stage. The originator of the literary genre is probably Callimachus, the third-century BCE Alexandrine poet and scholar better known as the author of epigrams and hymns. Callimachus was also the author of a lost work on the subject entitled *A Compilation of Wonders of the Entire Earth Arranged According to Their Locality*.[37] We know of the names of more than twenty Greek and several Roman paradoxographers who were active between the third century BCE and the third century CE, not counting others who made use of their writings.[38]

Lacking any theory of evolution, it is hardly surprising that the paradoxographers did not offer any explanation for the biological abnormalities that they tended to enumerate in catalogue form. They seem to have expected their readers to be fascinated by the fabulous purely for its own sake. That is to say, they subscribed to the proverbial Aristotelian assertion that "Libya always produces something novel (*ti kainon*)", without inquiring as to why this might have been the case (Arist. *GA* 746b 7–13).[39] Perhaps they thought no explanation was necessary, on the grounds that their readers would assume that environmental determinants were the cause of these aberrations in the tradition of the influential Hippocratic treatise *Airs, Waters, and Places*.[40]

Two of the earliest practitioners of paradoxography, Onesicritus and Nearchus, accompanied Alexander on his campaign out East. In fact it is not inconceivable that Alexander was prompted

to undertake his expedition in part by the tales that travellers brought back from the East and the hope of encountering strange peoples himself. His journey to India was one of exploration as well as conquest. Not for nothing did botanists and ethnographers follow in his train.[41] It is entirely fitting, therefore, that the notion that Alexander went beyond the boundaries of the known world and encountered the wonders of the East should feature prominently in the Greek version of the *Alexander Romance*, whose origins probably lie in the third century BCE.[42] Indeed a major source for the *Romance* was the description of India by Onesicritus (*FGrH* 134 F 1–38). I can just see Alexander leaping down from his horse and ordering his army to halt whenever his eyes caught sight of a previously unknown fern or reptile.[43]

Paradoxography enjoyed a new flowering in the Roman imperial era. A notable example was the *Book of Marvels* by Phlegon of Tralles, a freedman of the Emperor Hadrian (*FGrH* 257 F 36). Phlegon not only lists a hotchpotch of prodigies, ghost stories, and monstrous births, but also describes a hippocentaur (the more accurate term for a centaur), which was found in an unidentified city called Saune in Arabia. When it died, the creature was embalmed and brought to Rome, where it was seen by Pliny the Elder (*FGrH* 257 F 36 fr. 34; Plin. *HN* 7.3.35).[44]

It is easy to dismiss paradoxography as a frivolous and disreputable genre that was inconsistent with a serious scientific outlook. Certainly that was the attitude of its critics. As Beagon points out, however, the paradoxographers lived at a time when the Greek and Roman world was expanding rapidly.[45] They are therefore the product of "an expansionist and outward-looking mentality". Just as Alexander's far-flung campaigns had stimulated the imagination and prompted curiosity, so, too, did Rome's far-flung empire give rise to a belief in marvellous peoples.

The rationalism of Lucretius

For Lucretius, author of *De Rerum Natura*, ethnic deformity embodies, both literally and metaphorically, a series of failed attempts on Nature's part to produce a human species that could grow to maturity, obtain nourishment, and successfully propagate (5.837–54). These failures, which he classified as *portenta*, include peoples who were undifferentiated in their reproductive organs (termed *androguni*); were footless, headless, mouthless, or faceless; or had limbs attached to the sides of their bodies in such a way that they were unable to avoid danger or to acquire the necessities of life.[46] Lucretius does not cite any evidence in support of his claims. Rather his 'observations' are the result of a thought experiment that he has conducted to explain human evolution. This, he proposes, is the consequence of several, apparently unrelated, false starts on Nature's part, since "we see that many conditions have to align themselves so that living creatures [*res* in Latin] can through propagation fashion the centuries to come" (5.849–50).

The Epicurean view of creation is remarkably similar to that of the pre-Socratic philosopher Empedocles of Acragas (c. 490–430 BCE), with this important proviso: whereas Empedocles adhered to the doctrine of preformation, viz. the belief that all life is the product of tiny pre-formed parts that fuse together, Lucretius was an atomist, committed to the notion that zoogonic failures and successes were the result of either unsustainable or sustainable atomic combinations, but essentially random and purposeless.[47] It follows that the human race is as much an example of a *portentum* as are the many maladapted creatures that failed to reproduce themselves, being superior to these failures primarily in its reproductive ability. Lucretius, however, denies the existence of hybrid monsters such as centaurs and their like on the grounds that the biological development of the two species from which they are allegedly formed is so different

(5.878–99). A horse reaches maturity at the age of three when a boy is hardly past nursing and is in its decline when a youth is reaching the height of his powers.

The 'credulity' of Pliny the Elder

The work of the paradoxographers provided the basis for Pliny the Elder's exhaustive catalogue of monstrosities, both human and animal, which is included in Book 7 of his *Natural History*. Pliny introduces each wonder with a phrase such as "As Isogonus of Nicaea writes," "As Crates of Pergamum says," "As Agatharcides writes," and so on. He cites only a single authority for each wonder and rarely instances the same authority more than once.[48] Here as elsewhere in his encyclopedia it is impossible to detect "an overarching structural principle or a philosophical rationale".[49] The citations are apparently intended to indicate that his research has been exhaustive, though it is unlikely that he consulted the authors first-hand. Most probably, he relied on epitomes of wonder-writings that were widely available in his day.

Pliny identifies each ethnic deformity, apparently indiscriminately, as either a *genus* or a *gens*. He also includes reports of peoples who possess miraculous properties. They include the Marsi, whose saliva is poisonous to snakes, and the Pharmaces, whose sweat is medicinal (*HN* 7.15, 17).[50] *Mirabilia*, including but not limited to fabulous races, are primarily located in the remotest parts of the world. Scythia is particularly prominent as a location, though as Beagon notes, Pliny's Scythia is "a vaguer and wider entity [than Herodotus'] embracing the whole of north Asia from the sea of Azov to China in the east, and India in the south."[51] It is noteworthy, too, that a few of the tribes live not at the ends of the earth but in the heart of Italy, such as the Marsi.

Pliny has been much criticized for his apparent credulity. Very likely he faced a similar charge in his day. He was certainly well aware of the disbelief to which reports of ethnic deformity gave rise among the Roman reading public. In the preface to his account of the varieties of ethnic deformation, he mounts two arguments in defence of their actuality (*HN* 7.6–8). The first is that scepticism and incredulity, far from revealing intellectual sophistication, are actually a species of naïveté. "Who believed in the Ethiopians before setting eyes on them? What is not treated as miraculous when it first comes to our notice? How many things are judged impossible before they actually happen?" he demands. His second argument is from analogy. Given the extraordinary diversity that species of animals such as peacocks, tigers and panthers manifest, why should we doubt that there are a comparable number of marvellous human races in the world, particularly since among all the thousands of humans on the face of the earth no two examples are identical? From a contemporary perspective, Pliny's reasoning would have seemed cogent, if not fully convincing.[52]

At the same time, it is important to note that Pliny does not actually endorse the reports of the fabulous peoples whom he catalogues. Rather he sees it as his responsibility to provide an exhaustive compendium of all the varieties of human beings that are attested. He urges his readers to exhibit due deference to the Greeks, who are his principal authority, "because of their excessive diligence and research" (*HN* 7.8). This statement is noteworthy in light of the fact that elsewhere Pliny is highly critical of the Greeks, whose character flaws, in his view, undermine their reliability (e.g. *HN* 3.152). He concludes his survey on *mirabilia* with an edifying paean, in which he asserts that "Ingenious nature devised these and similar variants of the human species as a source of diversion to itself and of wonder to ourselves" (*HN* 7.32)—a "conclusion that concludes nothing." As Murphy points out, since it draws no inferences and forms no general principles.[53]

The critics

We might suppose that reports of ethnic deformity would be rejected by a culture that evinced robust scepticism. In his discursus on Sicily, however, the ultra-rationalist Thucydides writes:

> The most ancient inhabitants of the place are said to be the Cyclopes and the Laistrygonians. I cannot say what kin-group (*genos*) they belonged to nor where they came from or where they went. We have to satisfy ourselves with what the poets said and with what anyone else knows (6.2.1).

Thucydides' refusal to deny the existence of monstrous peoples is particularly revealing—and vexatious to the modern critic—in light of the fact that he relished the role of myth-buster. Perhaps he refrained from challenging Homer's authority for his own purposes, since elsewhere he treats the *Iliad* as a source of unimpeachable trustworthiness (e.g. 1.10); or perhaps he expected his readers to accept the poet's word as fact and was simply not inclined to disabuse them of their naïveté. One scholar has provocatively suggested that Thucydides' narrative at the beginning of book 6 "was not ever really designed to alleviate the condition of ignorance that it asserts."[54] If we accept that theory, what better way of obfuscating the understanding of his readers than by refusing to dispute the claim that Sicily's original inhabitants were one-eyed giants, which, we may assume from Thucydides' comment, was common lore in his day? Correct or not, however, the theory does not settle the question whether the historian himself subscribed to the belief.[55]

In fact, no surviving work casts doubt on the veracity of reports of ethnic deformity until the first century BCE. Their most virulent critic was the geographer Strabo (1.2.35), who castigated those who wrote about India for having "deliberately woven mythic material into their work, not because they are ignorant of the truth, but because they have intentionally devised impossible facts for the sake of creating startling novelty (*terateia*) and pleasure (*terpsis*)." As Strabo explains later (2.1.9), this includes tall tales about the *enōtikoitoi* (those who sleep in their ears), the *astomoi* (mouthless people), the *arrhines* (noseless people), the *monophthalmoi* (one-eyed people), the *makroskeleis* (long-legged people), and the *opisthodaktuloi* (people with fingers turned backwards).

Strabo's outrage did nothing to eradicate the Roman appetite for paradoxography. Aulus Gellius (*NA* 9.4), writing more than a century later, described how he was strolling through the market in Brundisium when he came across bundles of papyri written in Greek "filled with incredible things, things you've never heard of. Yet they were written by ancient authors with high reputations, such as Aristeas of Proconnesus, Isigonus of Nicaea, Ctesias, Onesicritus, Philostephanus, and Hegesias." Gellius goes on to say that he bought a great number of these papyri for a small amount of money. After reading several of the "remarkable claims largely ignored by our [i.e. Roman] writers." he says he was "filled with disgust for such inappropriate literature, which contributes nothing by way of adornment or usefulness". His attitude towards the material is, however, somewhat disingenuous. He says he is repeating the claims so that "whoever reads them will not be exposed as completely ignorant and unlettered when hearing about things of this sort." In other words, he chooses to have his cake and eat it. It is revealing, too, that he tacitly implies that the genre is exclusively Greek. Lastly, Lucian in *True History*, with his accounts of Treetrunk women, Cloudcentaurs, and Corkfeet people, satirizes paradoxography mercilessly, accusing its authors of "telling lies of all kinds in a plausible and specious manner" (*VH* 1.2). The credulity of travellers' tales remained a live issue well into the eighteenth century, as evidenced by Jonathan Swift's *Gulliver's Tales*

(first published 1726), which has been aptly characterized as "a burlesque of the lack of truthfulness in travellers".[56]

Conclusions

Neither the Greeks nor the Romans seem to have equated ethnic deformity with diminished mental capacity. Though the Cyclops Polyphemus proves no match for wily Odysseus, it is Odysseus' overweening pride that proves his undoing, by inducing him to reveal his identity to the Cyclops and thereby giving the monster the power to curse him. Even centaurs, which are liable to get out of hand when drunk, were not viewed as universally savage, as indicated by the special status accorded to Chiron, the tutor of Achilles, among others. Oddly, there is never any suggestion that any physiological aberration, when shared by an entire people, restricts their ability to function adequately or in any way handicaps them. The margins of the world favoured not only peoples who exhibited anatomical aberration, but also those who indulged in aberrant behaviour: cannibalism at one end of the spectrum and exemplary virtue at the other. In other words, physiological and behavioural aberration often went hand in hand.

For the most part, all the writers we have reviewed provide only a brief description of the peoples whom they identify as abnormal. They offer little explanation as to how the peoples came into existence and rarely indicate how their abnormalities affected their lifestyles. We may assume, but are not told, that deviation from the norm was viewed primarily as a consequence of environmental determinants. Thus the fact that the *skiapodes* used their giant foot or feet to shelter themselves from the sun may have been predicated on the fact that there was no other means of sheltering from the intense heat in the region that they inhabited. In other words, it is possible that a rudimentary sense of evolutionary adaptation to environmental challenge inspired belief in their existence, though this does not account for, say, either the dog-headed or the headless.

The motives of the paradoxographers wholly elude us. Rarely can we determine their attitude towards the material which they cite. It is significant that none of them claimed to have set eyes on any of the deformed peoples whom they describe. Even so, it would be extremely unwise to dismiss the entire corpus as the work of charlatans and liars, as Strabo and Aulus Gellius did. So far as we can ascribe any authorial intention to their work, it seems that they sought to render the margins of the known world more exotic for both diversionary and educational purposes, without believing there was any need to differentiate between the two. Nor can we reject the possibility that some of them wrote tongue-in-cheek or that they invariably expected their readers to accept all their claims at face value. Indeed it is possible that in some cases their motive was 'ethnographical satire,' which they employed to "satirize the human race and undermine the validity of anthropocentrism".[57]

What percentage of the Greek and Roman population believed in the existence of centaurs, Sirens, or the dog-headed? Where did fantasy end and reality begin? We cannot possibly know. Pliny, arguably the most educated person of his day, was, as we have seen, credulous, somewhat paradoxically as it seems to us, as a result of his cautious adherence to a high standard of scientific inquiry. But what of his contemporaries? We cannot actually be sure that a more sceptical attitude towards ethnic deformity evolved over time. Rather, the opposite may have been the case. In fact, it was at times of expansion that the Greek and Roman imagination seems to have extended its concept of what was anatomically possible, as was the case, too, until at least the eighteenth century.[58]

Two main factors may have contributed towards this phenomenon. The first is the strength and vitality of the scholarly tradition, which derived from the Greeks, who in the eyes of the

Romans enjoyed very considerable prestige. The second was the variety of exotic creatures that the Romans saw first-hand, which led men of intellectual refinement to conclude that the human species was capable of an equally broad assortment of *gentes* and *genera*. In the same way, reports of fantastic animals, such as parrots and hippopotami, which may well have been discounted at first, proved true over time, very likely prompting the conclusion that sightings of fabulous peoples would one day be vindicated as well. Occasionally, too, fabulous beings went on display like the hippocentaur mentioned earlier.[59]

It is time to make a long overdue confession. When I first began this investigation, I entitled it 'Demonizing the Other'. It turns out, however, that the invention and application of ethnic deformity owed little, if anything, to what is distinguishable as racism or ethnic prejudice, and, moreover, that those peoples who exhibited abnormalities were thought of as in no way inferior to the Greeks and the Romans.[60] No less striking is the fact that the Greeks and the Romans made no attempt to debase on physiological grounds those peoples who did them most harm, such as the Persians in the case of the Greeks and the Carthaginians and Gauls in the case of the Romans. 'Demonization' as a concept had little place in the Graeco-Roman assessment of, or interaction with, the Other, whether the Other was actual or imagined. The positioning of Pliny's account of the *gentes huius monstri* at the beginning of his investigation of man indicates that the ethnically deformed were incontestably human. This was in marked contrast to the attitude of both the Greeks and the Romans towards individuals (as opposed to peoples) manifesting physiological abnormalities, who were often treated with considerable fear and loathing.[61]

In conclusion, who is so bold as to assert that there are no *gentes mirabiles figurae* on one of the exo-planets circling KOI-351?

Notes

1 Laes *et al.* 2013.
2 See also Kennedy, this volume, for further discussion of the terminology of identity in Archaic and classical Greek.
3 The word 'ethnicity' was coined in 1942 in acknowledgement of the fact that, whereas nationalism is a modern concept, "we find primordialist group notions of ties of kinship, language, religion, race, shared experience, and territory already in antiquity" (Malkin 1998, 55). Though far from ideal, it is preferable to any other term in common usage. As Kennedy *et al.* (2013, xiii) note, however, "The ancients would not understand the social construct we call 'race' any more than they would understand the distinction modern scholars and social scientists generally draw between race and 'ethnicity'." For the demise of the term 'race' and its replacement by 'ethnicity' in both scholarly, popular and political discourse, see Fenton 2003, 51–72.
4 Hesiod's misogyny is well established and the allegory provides a specific justification for it. On this topic, see further Arthur 1982, 63–82; 1983, 97–116.
5 Hall 1997, 33.
6 For the ethnogenesis of the Greeks, see further Hall 1997, 125–71.
7 Hall 2002, 111–12.
8 The term *gentium mirabiles figurae* is found at the beginning of Book 1 in the summary of the contents of the 37 books of Pliny's *Natural History.* Cannibalism takes many forms. Whereas the Scythian *anthropophagoi* according to Herodotus seemingly need no pretext to eat human flesh, the Massagetai, a people who inhabit the region around the River Oxus, do so in the belief that being eaten "is considered most blessed for the dead" (1.216.3). Herodotus does not explain why the Indian Padaioi feast on the flesh of their dead (3.99).
9 While Pliny's use of the term *gentes huius monstri* might seem to approximate to 'ethnic monstrosity', the Latin word *monstrum* basically means 'that which is portentous' and though 'that which is portentous' often inspires dread, it does not inevitably do so. There is no reason to suppose that Pliny is using the word in its technical, i.e. religious sense here.

10 As Beagon 2005, 117 notes, the designation 'Ethiopian', though initially applied to a fabulous people, by the time of Pliny had come to denote "an actual people south of Egypt." For further discussion, see Snowden 1991, 3–10 and 46–59 (for their depiction in art); and Romm 1992, 49–60. For a selection of ancient sources on the Ethiopians, see Kennedy *et al.* 2013, 179–201.
11 Chappuis-Sandoz 2008, 30–31; Garland 2010, 160–61.
12 Lenfant 1995, 319–20; Nichols 2011, 26.
13 See Beagon 2005, 167–8 for useful commentary on this passage, with examples, too, of individual monstrosities in Pliny's day and later.
14 In addition to the deformed peoples encountered by Odysseus in the *Odyssey* (see below), the *Iliad* alludes briefly to the war of the cranes and pygmies (3.5–6). Hesiod in a lost work called *Periodos gēs* alluded to the *hemikunoi* (half-dogs), *makrokephaloi* (big heads), and pygmies (fr. 153 in Merkelbach and West = Strab. *Geog*. 7.3.6). The source for some of the ethnically deformed may well lie in non-classical literary traditions, notably Buddhist (Nichols 2011, 156). See Murphy 2004, 90–91 for an interesting response to my suggestion that one of the factors that may have stimulated belief in deformed peoples was encounters with misshapen individuals and exotic animals.
15 Nichols 2011, 93.
16 I have argued elsewhere that Homer's treatment of Polyphemus "serves as a subtle yet unambiguous demonstration of the hero's intellectual and moral shortcomings, and by extension those of the culture he represents" (Garland 2010, 91–4).
17 The Arimaspians were the subject of a lost epic poem called the *Arimaspeia* by Aristeas of Proconnesus that was probably written in the sixth century. See Romm 1992, 71–7 and Skinner 2012, 64–8.
18 Lenfant's assertion (1999, 211) that "Herodotus insistently rejects what he considers as incredible legends" is in my view substantially correct.
19 Hall 1989, 41.
20 E.g. Hall 1989; Huang 2010.
21 Isaac 2004, 257–303.
22 Gruen 2011, 20.
23 As Isaac 2004, 273 writes, "[Herodotus] does not disparage Persia at all, but sees the Greek victory as one achieved in spite of the immense power of the enemy." He further notes (p. 282) that the attitude of Herodotus and other fifth-century authors towards the Persians is "oddly at variance with those ascribed to them as a matter of course by many scholars over the past century." So, too, Kennedy 2013, 67, who states definitively in the preface to her discussion of Aeschylus' *Persians*, "I reject the notion that the Athenians rejected Persia in reality or even ideologically." For the receptivity of Athenians to Persian culture in the fifth century see, importantly, Miller 2004.
24 See Cartledge 2002, 51–77 for the complexities of the Greek construction of the barbarian. It has been suggested that the iconographic programme of the Parthenon, though it makes no direct reference to the Persian Wars, was in part intended to be read as a clash of civilizations, notably in the battles with the Amazons and with the centaurs, perceived as inferior 'others' (Spivey 1997, 221–32). Even if this is the case, however, I am unclear whether mythological allusiveness should be regarded as indicative of a deeply held prejudice. See Root 1985 for arguments that the Athenians borrowed elements of Persian iconography for the Parthenon frieze. There is little to suggest that the mutiny, which Alexander faced in Opis in 324, partly as the result of the incorporation of 30,000 Persian troops into his army, was to any appreciable degree fuelled by ethnic animosity on the part of the Greeks (Gruen 2011, 73–5).
25 Gruen 2011, 132.
26 As Benabou 1975, 151 points out, "[L]e domaine des prodigies est chez Pline particulièrement étendu puisqu'il commence aux Noirs!" See also the arguments of Snowden 1991 for the lack of colour-specific prejudice in antiquity.
27 Dee 2003–4, 162.
28 Herodotus, who alludes to Scylax, makes no mention of the account of his travels (4.44). See further Romm 1992, 84–6. On ancient exploration and explorer accounts more broadly, see Roller 2006.
29 For the accuracy of Photius' epitome of Ctesias, see Bigwood 1989, 302–16.
30 Nichols 2011, 24.
31 Romm 1992, 86.
32 Romm 1992, 80 interestingly writes: "Far from confirming the supremacy of man over the 'sub'-human Ctesias seems instead to have used the Dog-heads to call that supremacy into question." For the *kunokephaloi* in subsequent literature, see Beagon 2005, 152–3.

33 Lenfant 1999, 210 claims that Herodotean ethnography "makes physical and moral perfection converge" as in the case of the Ethiopians, whereas in Ctesias "[m]oral qualities are . . . independent of physical beauty", but this is an over-simplification, as Herodotus' description of the Argippaeoi indicates.
34 Pygmies first appear in Greek art at the beginning of the sixth century. Two distinct types can be identified: (1) perfectly proportioned miniature human beings and (2) individuals afflicted with achondroplasia, viz. with enlarged heads and penises and stunted arms and legs. As Dasen 1994, 600 suggests, it is not always possible to distinguish between the two types in artistic representations. Ctesias' detailed description of pygmies is unique in classical literature. For pygmies in art, sometimes with enlarged penises, see Dasen 1993, 182–4; 1994, 594–601 and Garland 2010, 116–17. For discussion of the situation of health at geographical and temporal margins, see Bosak-Schroeder, this volume.
35 Kosmin 2013, 99–104.
36 See Dueck, this volume.
37 Useful compilations of the genre include A. Westermann, *Paradoxographoi: Scriptores Rerum Mirabilium Graeci* (Brunswick and London 1839), O. Keller, *Rerum Naturalium Scriptores Graeci Minores* (Leipzig, 1877), and, most recently, A. Giannini, *Paradoxographorum Graecorum Reliquiae* (Milan, 1965). Giannini's anthology contains extracts from some 75 authors, the majority of uncertain date. For surveys of the genre, see Beagon 1992, 8–11, Wenskus 2007, cols. 506–9, and Garland 2010, 164–6.
38 Hansen 1996, 3.
39 See further Romm 1992, 88–9.
40 See Kennedy and Irby, this volume.
41 Nichols 2011, 28 claims that "curiosity about the unknown edges of the world, coupled perhaps with an insatiable desire for conquest, are what drove Alexander to invade India." Though this cannot be proven, it raises the tantalizing possibility that Alexander's curiosity may have been stimulated partly by the desire to encounter fabulous peoples face-to-face.
42 Also discussed in Kominko, this volume.
43 It should be noted, however, that the earliest extant version of the *Alexander Romance* by Pseudo-Callisthenes exists in a single manuscript dated to the third century CE and contains little of the fabulous element. See Stoneman 1991 for detailed discussion of the text.
44 Hansen 1996, 170–71.
45 Beagon 2005, 19.
46 As in the case of Pliny's use of *monstra*, there is nothing to indicate that Lucretius is applying the term in a religious sense, though as Campbell 2003, 110 interestingly points out that the word *portenta* "serves the useful function of tapping into popular superstition that monstrous births indicate the will of the gods" and in so doing "aid[s] his argument that there was no divine involvement in creation".
47 In both systems, as Campbell 2003, 107 notes, ". . . life is formed randomly in a great burst of mutations in the beginning of the world, and these mutations are then 'selected' by extinction, to produce viable species well adapted to their environment." As he further points out (2003, 5–6), albeit a non-creationist, Lucretius was not *strictu sensu* an evolutionist, though he has been and still is the focus of attack by creationists. It is not for nothing that only one manuscript of *DRN* survived until the Renaissance. For a lively account of the history of Lucretius' reception, see also Greenblatt 2011.
48 In alphabetical order, the authorities whom Pliny cites are as follows: Agatharcides, Apollonides, Aristeas of Proconnesus, Aristotle, Artemidorus, Baeton, Calliphanes, Clitarchus, Crates of Pergamum, Ctesias, Damon, Duris, Eudoxus, Herodotus, Homer, Isogonus of Nicaea, Megasthenes, Nymphodorus, Onesicritus, Phylarchus and Tauron. For Pliny's style, see Romm 1992, 105, who notes that the pace of the list is so frenetic that "The reader scarcely has time to absorb any single item before being hurried on to the next."
49 Doody 2010, 20.
50 See Jones-Lewis, this volume.
51 Beagon 2005, 122.
52 Pliny continues with his plea to his readers to take seriously the reports of fabulous peoples by citing the Cyclopes and Laistrygonians, whom he evidently expects his readers to believe are incontestably 'real' people inhabiting 'the centre of the world' (*in medio orbe terrarum*), viz. Sicily and southern Italy (*NH* 7.9). The author of *Periplus Maris Erythraei*, who was Pliny's contemporary, alluded to an Indian people known as "the Hippioprosopoi (or Horse-faces), who are reputed to be cannibals" (ch. 62). See

Casson 1989, 234. The examples of ethnic deformity mentioned by Pliny helped formulate the medieval world's ideas about India and the East and were cited well into the sixteenth century, so much so that they became dubbed the 'Plinian Races'. See Wittkower 1942, 159–97, Murphy 2004, 87–95, and Doody 2010, 31–8. Evidence lies in the fact that Francis Bacon (1561–1626) roundly criticized the *Natural History* for being "fraught with much fabulous matter . . . to the great derogation of the credit of natural philosophy" (quoted in Doody 2010, 35).

53 Murphy 2004, 90. For Pliny's concept of individual and ethnic deformity, see also Gevaert and Laes (2013, 211–30). For his interest in naturally occurring and manmade *mirabilia* throughout the *Natural History*, see Healy (1999, 63–70).

54 Smith 2004, 38.

55 Thucydides' use of the word *genos* to describe the Cyclopes is intriguing. It is perhaps a reflection of the belief that they were believed to be descended from Poseidon, though its usage here would also seem to suggest that they were seen as a sub-set within an *ethnos*. See Smith 2004, 36–7 for further discussion of Thucydides' allusion to the Cyclopes and Laistrygonians.

56 Adams 1962, 229.

57 Romm 1992, 71 and 80.

58 See Gevaert and Laes 2013, 220–21, who instance the thirteenth–fourteenth-century explorer Marco Polo, a sixteenth-century Swiss doctor called Conrad Gesner, the sixteenth-century French surgeon Ambroise Paré, and the eighteenth-century missionary Joseph Lafitau, all of whom claimed to have seen 'monsters'. Cf. also Shakespeare, *The Tempest* Act 3 Scene 3: "When we were boys,/Who would believe . . . that there were such men/ Whose heads stood in their breasts? Which now we find/ Each putter-out of five for one will bring us/ Good warrant of." See also Kominko, this volume.

59 We also hear of a live satyr that was captured in Dyrrhacium in 83 BCE and later brought before Sulla. Those who interrogated it could get no intelligible answer from it and Sulla, horrified, ordered the creature to be removed from his sight (Plut. *Sull.* 27.2). See Hansen 1996, 171–4 for examples of the display of miraculous creatures in Rome and elsewhere. They include several Tritons and Nereids. As he notes (p. 171), it is impossible to determine "which of these exhibits were instances of erroneous identification and which were deliberate frauds".

60 This is clearly a highly sensitive topic, and I do not mean to suggest that the Greek and the Romans were without their prejudices. Far from it. I am merely suggesting that their relations with hostile peoples seems not have been informed by any overarching theory of racial typology. See further Banton (1977, 156–72) for discussion of the problematic usage of the word 'racism' in historical, sociological and political discourse.

61 See Lenfant 1999, 198–206, Cuny-Le Callet 2005, and Garland 2010 for the treatment of persons exhibiting congenital deformities in the Graeco-Roman world. Further discussion of the subject of this essay can be found in my chapter entitled 'Racial Deformity' (pp. 159–77), though I now refute my conclusion (p. 176) that "Paradoxography . . . served to reinforce the concept of racial superiority that was so essential to classical culture."

Bibliography

Adams, Percy G. 1962. *Travelers and Travel Liars, 1660–1800.* New York. Reprinted 1980.

Arthur, Marilyn B. 1982. "Cultural Strategies in Hesiod's *Theogony*: Law, Family, and Society." *Arethusa* 15: 63–82.

——. 1983. "The Dream of a World without Women: Poetics and Circles of Order in the *Theogony* Proemium." *Arethusa* 16: 97–116.

Atherton, Catherine. 2000. *Monsters and Monstrosity in Greek and Roman Culture.* Bari: Levante.

Bailey, Cyril. 1947. *Titi Lucreti Cari De Rerum Natura Libri Sex.* Vol. III. Oxford: Clarendon Press.

Banton, Michael. 1977. *The Idea of Race*. Boulder, CO: Westview Press.

Beagon, Mary. 1992. *Roman Nature: The Thought of Pliny the Elder.* Oxford Classical Monographs. Oxford: Clarendon Press.

——. 2005. *The Elder Pliny on the Human Animal: Natural History Book 7*. Translation with historical commentary. Oxford: Clarendon Press.

Benabou, M. 1975. "Monstres et Hybrides chez Lucrèce et Pline l'Ancien." In *Hommes et Bêtes: Entretiens sur le Racisme*, edited by L. Poliakov, 143–52. Paris: École des Hautes Études en Sciences Sociales and Mouton & Co.

Bigwood, Joan. 1978. "Ctesias as Historian of the Persian Wars." *Phoenix* 32: 19–41.
——. 1989. "Ctesias' *Indica* and Photius." *Phoenix* 43: 302–16.
Bindman, D. and H.L. Gates, Jr. 2010. *The Image of the Black in Western Art.* Cambridge, MA: Belknap Press.
Bosworth, A.B. 1996. "The Historical Setting of Megasthenes' *Indica*". *Classical Philology* 91: 113–27.
Campbell, Gordon 2003. *Lucretius on Creation and Evolution: A Commentary on De Rerum Natura 5.772–1104*. Oxford: Oxford University Press.
Cartledge, Paul. 2002. *The Greeks: A Portrait of Self and Others*. Oxford: Oxford University Press.
Casson, Lionel. 1989. *The Periplus Maris Erythraei: Text with Introduction, Translation, and Commentary.* Princeton, NJ: Princeton University Press.
Chappuis-Sandoz, L. 2008. "La Survie des Monstres: Ethnographie Phantastique et Handicap à Rome." *Latomus* 67: 21–36.
Cuny-Le Callet, Blandine. 2005. *Rome et Ses Monstres. Naissance d'un Concept Philosophique et Rhétorique*. Grenoble: Jérôme Millon.
Dasen, Véronique. 1993. *Dwarfs in Ancient Egypt and Greece.* Oxford: Oxford University Press.
——. 1994. "Pygmaioi". *Lexicon Iconographicum Mythologiae Classicae*, 7: 594–601. Zurich and Munich: Artemis Verlag.
Dee, John H. 2003/04. "Black Odysseus, White Caesar: When Did 'White People' Become 'White'?" *Classical Journal* 99: 157–67.
Doody, Aude. 2010. *Pliny's Encyclopedia: The Reception of the Natural History.* Cambridge: Cambridge University Press.
Fenton, Steve. 2003. *Ethnicity*. Cambridge: Polity Press.
Garland, Robert S.J. 2010. *The Eye of the Beholder: Deformity and Disability in the Graeco-Roman World*. 2nd edn. London: Bristol Classical Press.
Gevaert, Bert and Christian Laes. 2013. "What's in a Monster? Pliny the Elder, Teratology, and Bodily Disability." In *Disabilities in Roman Antiquity: Disparate Bodies* a Capite ad Calcem, edited by C. Laes, C.F. Goodey and M. Lynn Rose, 211–30. Leiden: E.J. Brill.
Giannini, Alexander. 1966. *Paradoxographorum Graecorum Reliquiae.* Milan: Istituto Editoriale Italiano.
Greenblatt, Stephen. 2011. *The Swerve: How the World Became Modern.* New York and London: W.W. Norton.
Gruen, Erich. 2011. *Rethinking the Other in Antiquity*. Princeton, NJ: Princeton University Press.
Hall, E. 1989. *Inventing the Barbarian: Greek Self-Definition through Tragedy*. Oxford: Clarendon Press.
Hall, Jonathan M. 1997. *Ethnic Identity in Greek Antiquity.* Cambridge: Cambridge UniversityPress.
—— 2002. *Hellenicity: Between Ethnicity and Culture*. Chicago, IL and London: University of Chicago Press.
Hansen, William. 1996. *Phlegon of Tralles' Book of Marvels,* Translated with an Introduction and Commentary. Exeter: University of Exeter Press.
Healy, John F. 1999. *Pliny the Elder on Science and Technology.* Oxford: Oxford UniversityPress.
Huang, Yang. 2010. "Invention of Barbarian and Emergence of Orientalism: Classical Greece." *Journal of Chinese Philosophy* 37: 556–66.
Isaac, B. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.
Karttunen, Klaus. 1997. *India in the Hellenistic World.* Helsinki: *Studia Orientalia* 83.
Kennedy, Rebecca Futo. 2013. 'A Tale of Two Kings: Competing Aspects of Power in Aeschylus' *Persians*'. *Ramus* 42: 64–88.
Kennedy, Rebecca Futo, C. Sydnor Roy and Max L. Goldman. 2013. *Race and Ethnicity in the Classical World: An Anthology of Primary Sources in Translation*. Indianapolis, IN and Cambridge: Hackett Publishing.
Kosmin, Paul. 2013. "Apologetic Ethnography: Megasthenes' *Indica* and the Seleucid Elephant." In *Ancient Ethnography: New Approaches*, edited by Eran Almagor and Joseph Skinner, 97–115. London: Bloomsbury.
Laes, Christian, C.F. Goodey and Martha L. Rose. 2013. *Disabilities in Roman Antiquity: Disparate Bodies, a Aapite ad Calcem*. Leiden: E.J. Brill.
Lenfant, Dominique. 1995. "L'Inde de Ctésias: Des Sources aux Représentations." *Topoi* 5: 309–36.

——. 1999. "Monsters in Greek Ethnography and Society in the Fifth and Fourth Centuries BCE." In *From Myth to Reason? Studies in the Development of Greek Thought*, edited by R. Buxton, 197–214. Oxford: Oxford University Press.

Malkin, Irad. 1998. *The Returns of Odysseus: Colonization and Ethnicity.* Berkeley: University of California Press.

Martin, Ernest. 2002. *Histoire des Monstres Depuis l'Antiquité Jusqu' à Nos Jours*. Paris: C.Reinwald.

Miller, Margaret C. 2004. *Athens and Persia in the Fifth Century: A Study in Cultural Receptivity.* Cambridge: Cambridge University Press.

Murphy, Trevor M. 2004. *Pliny the Elder's Natural History: The Empire in the Encyclopedia*. Oxford: Oxford University Press.

Nichols, Andrew. 2011. *Ctesias on India and Fragments of his Minor Works*. Introduction, translation, and commentary. London: Bristol Classical Press.

Roller, Duane W. 2006. *Through the Pillars of Herakles: Greco-Roman Exploration of the Atlantic.* New York and London: Routledge.

Romm, J.S. 1992. *The Edges of the Earth in Ancient Thought: Geography, Exploration, and Fiction.* Princeton, NJ: Princeton University Press.

Root, Margaret C. 1985. "The Parthenon Frieze and the Apadana Reliefs at Persepolis: Reassessing a Programmatic Relationship." *American Journal of Archaeology* 89: 103–20.

Skinner, Joseph. 2012. *The Invention of Greek Ethnography*. Oxford: Oxford University Press.

Smith, David. G. 2004. "Thucydides' Ignorant Athenians and the Drama of the Sicilian Expedition." *Syllecta Classica* 15: 33–70.

Snowden, Frank M. 1991. *Before Color Prejudice: The Ancient View of the Blacks*. Cambridge, MA: Harvard University Press.

Spivey, Nigel. 1997. *Greek Art.* London: Phaedon.

Stoneman, Richard. 1991. *The Greek Alexander Romance.* London: Penguin Books.

——. 2012. *The Legends of Alexander the Great*. London: I.B. Tauris.

Wenskus, Otta. 2007. "*Paradoxographoi*." In *Brill's Encyclopaedia of the Ancient World: New Pauly*, edited by H. Cancik and H. Schneider, Vol. 10: 506–9. Leiden and Boston, MA: E.J. Brill.

Wittkower, R. 1942. "Marvels of the East." *Journal of the Warburg and Courtauld Institute* 5: 159–97.

4
ETHNIC BODIES
Physiognomy, identity and the environment

Max L. Goldman

> *Why, Zeus, when you have provided humanity with clear proof of faked gold, does the body have no natural mark that could reveal men's wickedness?*—Euripides, *Medea* 516–19
>
> *You can't trust appearance.*—Juvenal 2.8

Introduction

The critical god Momus found fault with Hephaestus because the artisan god failed to insert a window in people's chest, a window through which one could see intentions and thoughts, honesty and falsity (Luc. *Hermot.* 20). Momus' criticism reflects a peculiarity in the human condition: we frequently find we have no choice but to interact with other people, people who may deceive us, who may have hidden agendas, who may be harboring some terrible secret. Physiognomy, the theory and practice of interpreting inner states and dispositions from the body, promises to open Momus' window, to render the body legible. The legible body appears as early as Homer's description of Thersites and continues in contemporary scientific journals, a continuity of interests matched by the diversity of practices and ideas.[1] The ancient technical handbooks of Pseudo-Aristotle, Polemon and his epigones, however, reveal a consistent focus and procedure: they concentrate on an individual's stable character, frequently through analogies with animals and foreign peoples.[2] For these authors, the validity of such comparisons does not originate in empirical induction, in a scientific process of generalized truths derived from observation. Instead, the validity stems from the assumption that the body and soul are connected: "physiognomy is possible provided one grants that the body and soul change together in respect to their natural affections" (Arist. *An. pr.* 70b7–9). This passage in Aristotle concerns the logical basis for physiognomy and reveals the basic authorizing principle for the handbooks of physiognomy: the mutual relationship of body and soul.[3]

The mutual relationship of body and soul authorizes the practice of physiognomy in the handbooks and it inspires the use of ethnographic comparisons. These ethnographic comparisons appear to imply, as Benjamin Isaac suggests, that "environment determines both external appearance and character. This assumption underlies the theory and practice of physiognomics" (2004, 149). No studies, however, have examined in detail the role of environmental

determinist ideas or even explored how the handbooks employ ethnicity. What is the extent to which environment and environmental theory underlie the use of ethnicity in the handbooks of physiognomy from antiquity? This simple question turns out to require a nuanced answer because these handbooks maintain a complex relationship to environmental theory. In order to understand this complexity, it will be necessary to locate the interests of the handbooks' authors within the broader field of physiognomy and to show how they organize their material into applied and methodological sections. From this basis, I will argue that the handbooks' authors followed in the applied sections an essentially static physiognomic tradition, a tradition that relied on basic stereotypes without any explicit environmental basis. Each of the authors, however, engaged in their own way with environmental theory in their methodological and general discussions.[4]

The relationships between the handbooks are difficult to disentangle.[5] The physiognomy attributed to Aristotle is the earliest, consisting of two handbooks composed by different peripatetic authors in the third century BCE.[6] Polemon, the famous rhetor of the second century BCE, composed another major handbook, now lost, which the Arabic Leiden Polemon, Adamantius, and the Anonymous Latinus all translate, adapt and paraphrase.[7] These three adaptations of Polemon contain differences, which may be due to their author's own ideas or to influence from Ps.-Aristotle and the doctor Loxus.[8] My general arguments do not require exact attribution of any individual claim or statement. It is important to recognize one feature that they all share: they all contain 'practical' explication of signs, for example, "a very small head indicates lack of understanding and knowledge" (Leiden Polemon B30). In these practical sections, individual somatic signs are associated with specific character traits without adducing explicit reasons for the connection. Why do small heads contain small minds? The author feels no need to explain. The handbooks all contain, in addition, methodological or general statements, for example, "permanent somatic signs indicate permanent psychic character" ([*Phgn.*] 806a7). There are, of course, numerous differences in detail among the handbooks in both the practical sections and in the methodological or general discussions. The Leiden Polemon, for example, contains an extensive practical analysis of the signs of the eyes, dwarfing what we find in Ps.-Aristotle. The methodological sections show even more variety between the handbooks. Within all this complex variation, however, an important pattern emerges: ethnic analogies in the practical sections are limited to skin color and hair. More interesting still, this practical use of ethnic analogies frequently conflicts with the more complex and various discussions of ethnicity elsewhere in the handbooks. The consistency of the practical analysis across the handbooks implies a coherent physiognomic tradition for ethnic comparison, based primarily on broadly assumed ethnic stereotypes and limited to somatic signs of skin color and hair. The writers' individual ideas about ethnicity and environment appear in their discussions of principles, which they frequently failed to integrate into their practical discussions. Before supporting these claims with examples from all the handbooks, it will be useful to provide a sense of the procedure and interests of the ancient handbooks of physiognomy.

The nature and scope of the ancient physiognomic handbooks

Physiognomy promises to establish mental dispositions from somatic signs. Loosely defined, the discipline's scope extends to encompass such a wide variety of bodily signs and aspects of mind that it quickly becomes unmanageable. In addition, the definition ignores 'predictive' or divinatory physiognomy.[9] Palm reading would fall into this category, and in Suetonius we find a forehead diviner, a *metoposcopus*, who predicted that Brittanicus would never be

emperor but Titus would be (*Titus* 2). Our handbooks provide only one clear example of this predictive practice: in the anecdote about the woman in Pamphilia, Polemon discovered signs of misfortune in the woman's body, particularly her nose, eyes and the movements of her head and feet. This misfortune turned out to be the accidental death of her daughter (Leiden B53). Even excluding the divinatory branch of physiognomy, which is otherwise absent from the handbooks,[10] the material requires some order to show where the ancient handbooks fit into the broader field, to illustrate their interests and ideas, and to reveal the areas where ethnographic and environmental elements find or, surprisingly, do not find a place. The typology suggested here is designed to be illustrative and useful rather than exhaustive and universally valid for all attempts to interpret the mind from the body. I divide the physiognomic field into four semantic signs and four mental qualities.

Types of mental qualities

The inner mental states may be divided into transitory emotions and stable dispositions. Ps.-Aristotle recognizes that the face often expresses transitory emotions, which he finds problematic for physiognomic practice (805a28ff, 806a5ff). His criticisms are three (805b1ff). First, men of different dispositions show the same facial expressions of transitory emotion. In other words, a shameless man and a courageous man show the same facial signs for anger. Second, a man of one disposition may show a contrary temporary emotion, for example, when a depressive experiences a moment of happiness. Finally, there are only a limited number of inferences that can be drawn from facial expressions. These criticisms are revealing. He does not reject the validity of the procedure of discovering temporary emotions from facial expressions, but argues instead that these signs are not good indicators for stable dispositions, revealing his assumption that stable disposition is the object of his science.[11] Similar to the other handbooks of technical physiognomy, Ps.-Aristotle attempts to discern stable dispositions, primarily negative ethical qualities such as cowardice, intemperance and lustfulness. The overwhelming focus on negative dispositions was recognized by Anon. Latinus, who chalked it up to the commonplace truth that humanity has more evil than good; he also recognized that the limited number of bad character traits are represented by a bewildering number of signs (44). Every reader will likewise be struck by the dull repetitiveness of negative character traits, which even a committed misanthrope would find excessive.

Another major distinction exists between innate and acquired characteristics. In fact, the handbooks of physiognomy generally neglect acquired characteristics or outright deny them somatic representation.[12] Ps.-Aristotle states plainly that acquired knowledge or opinions, as opposed to innate intellectual abilities, leave no signs on the body: physiognomy cannot reveal a doctor or a musician (806a14). One might imagine, however, that Sherlock Holmes could discover the guitar player by calluses on her fingers. It is not only imaginary detectives who disagree with Ps.-Aristotle here: Demosthenes suggests that spectators will scan the jurors' faces and be able to tell how they voted (Dem. 25.98).

The handbooks' indifference to acquired characteristics has important consequences, because acquired character is relevant to the role of ethnicity and environment. The focus on innate character diminishes the role of the environment in shaping the body and thus its role in causing mental characteristics. The handbooks, however, while generally indifferent to acquired characteristics, are not consistent on this point. Ps.-Aristotle, although he denies that acquired knowledge or opinion leave a somatic trace, imagines a sympathetic relationship between body and soul that is mutually causal when he describes how drunkenness and

illness, which are frequently acquired rather than innate, affect the soul (805a1). The distinction between innate and acquired character, though not frequently discussed in the handbooks, nonetheless remains important and will reappear.

Four types of somatic signs

Some somatic signs consist of static features, such as the color of the eye or shape of the nose; others signify dynamically through movement and change, such as gestures or gait.[13] Ps.-Aristotle makes a similar distinction between 'transitory' and 'permanent' signs, linking the permanent sign with permanent mental disposition (806a5). Despite his distrust of transitory signs, he nonetheless includes dynamic signs in his discussions. One sign of the shameless man, for example, is "rapidity in movements" (*en kinēsesin oxus* 807b31). In fact, all the extant handbooks treat dynamic signs as important material and use them to signify permanent as well as temporary mental dispositions. The second author in Ps.-Aristotle includes discussion of dynamic signs (813a23ff). The handbooks descending from Polemon include sections specifically on dynamic signs (Leiden Polemon B38–40, Adamantius B38–40, Anon. Lat. 74–6).[14]

It is also useful to distinguish controllable from involuntary signs. This distinction may be imagined as a continuum between absolutely controllable signs and the completely involuntary. Most dynamic signs are controllable, since a person could in principle refrain from making particular signifying gestures or change his gait or restrain the outward expression of a smile. Most static signs cannot be controlled because few people have the ability, without surgical intervention, to control the size and shape of their ears. Certain dynamic signs, however, cannot be controlled, such as the involuntary dilation of the pupil. Polemon's extended treatment of the eyes contains discussions of eye movements that we would classify as involuntary. In addition, contemporary physiognomy also attends to involuntary eye movement.[15] Eckhard H. Hess published an article in *Scientific American* in 1965 that demonstrated how pupil dilation signifies the intensity of mental activity, including various transitory emotions and attitudes. It is harder to imagine controllable static features, but body hair might provide an example. Although I am unable to compel the hair on my back to stop growing through an act of will (alas!), I can pluck it. The ancient handbooks of physiognomy prefer signs derived primarily from involuntary static somatic features and, to a lesser extent, controllable movements. The other two types of signs, however, occasionally occur and help to understand some of the assumptions and ideas that underlie the various practices and assumptions of physiognomy (Table 4.1).

The ancient handbooks do not explicitly divide the signs between controllable and involuntary. They do, however, understand the distinction because they discuss dissimulation. Adamantius even counsels his reader not to warn the subject before reading the body because the subject will change himself and disturb the signs (A4). The close connection between controllable and dynamic signs appears from the fact that the authors, such as Adamantius (B41), worry about dissimulation primarily in connection with signs derived from movement. Although such signs are generally controllable in principle, it is typically assumed

Table 4.1 Controllable vs. involuntary somatic signs

Signs	*Controllable*	*Involuntary*
Dynamic/transitory	Gestures	Pupil dilation
Static/permanent	Body hair	Ear shape

that the body produces 'natural' signs that dissimulators seek to repress. It is imagined that the meaningful, natural signs will often appear, as if they were 'slips of the body,' a sort of somatic parapraxis. Adamantius states the idea clearly in his section on the signs of movement (B 38). He advises taking note of "natural and unpremeditated" (*autophues kai apronoēton*) movements and he points out how the naturally androgynous man, although imitating a masculine man, will revert to his 'nature' when distressed or frightened.[16] Thus although some signs are in principle controllable, the handbooks assume that there exist 'natural' signifying movements outside conscious control, spontaneous and involuntary.

The ancient handbooks focus on static, involuntary physical features to signify innate and stable dispositions. This focus, along with the animal analogies, renders the handbooks quaint, if not bizarre, to a modern reader, who would likely not bat a signifying eye at a physiognomy that was primarily concerned with dynamic signs representing temporary emotions. People are generally very sophisticated in reading temporary emotional states from the face or body movement. Persistent inability to interpret such signs is one diagnostic for autism.[17] Handbooks are still published that promise to help improve the reader's ability to interpret body language, and scientific studies continue to investigate how temporary mental states and activities (e.g., lying or flirting) reveal themselves in the body. Computer scientists likewise are trying to construct programs that will analyze and respond appropriately to transitory emotions appearing on people's faces.[18]

Unlike these contemporary physiognomies, the ancient handbooks assume that the body does not acquire useful signs through activity or culture.[19] They are also generally indifferent to temporary emotions. This system treats ethnic character as a stable disposition, which is innate and not derived from cultural systems. Do the authors ascribe the innate qualities of ethnic groups to environmental causes? The answer turns out to be complex because, as the next section shows, the practical sections follow a static physiognomic tradition that relies on unsupported ethnic stereotypes. This traditional physiognomy frequently conflicts with the more complex and various discussions of the role of the environment elsewhere in the handbooks.

Ethnicity and environment in the handbooks

All the handbooks include ethnic comparison as one of the three major methods of physiognomy. Ps.-Aristotle places it second, between comparison to animals and the temporary emotions visible on the face. The first two methods, analogies to animals and ethnic categories, function in the same way. The ethnic method reasons from "the human race itself according to its ethnic divisions, to the extent these diverge in appearance and character, for example Egyptians, Thracians, and Scythians."[20] A similar tripartite division appears in Anon. Latinus, although he treats ethnic comparison as the ur-method for physiognomy (9):

> After establishing the characters of peoples and provinces (*gentium vel provinciarum propositis moribus*), they established similarities between individuals in order to say: this man is like an Egyptian and Egyptians are clever, teachable, fickle, rash and lustful; this man is like a Celt, that is, a German, and Celts cannot be trained, are brave and wild; this man is like a Thracian and Thracians are unjust, lazy, and drunks.

Because the authors include at this initial point no explanation why these stereotypes are valid or how they were derived, we may doubt any environment thinking underlies the comparisons. If the lion is brave, the Thracian is a drunkard. We are missing clear logical connections between environment and ethnicity such as we find, for example, in Posidonius:

> . . . the environment causes no small difference in human characters concerning cowardice or boldness, love of ease or labor and this is the case because the emotional movements of the soul always follow the state of the body, which diverges to no small degree from the mixtures of temperature.[21]

In contrast to Posidonius, who explains the basis for his reasoning about human difference, the handbooks initially deploy ethnicity as if the differences were, like the wealthy single man's need for a wife, a truth universally acknowledged. The use of stereotypes in the early explanations of method suggests that the authors did not rely on environmental theories, which might have bolstered their claims, but followed well-established stereotypes, though these stereotypes themselves may have rested upon environmental theories.[22] This conclusion finds support in the way ethnicity functions in the practical explication of ethnic analogies. These are all limited to skin color and hair on the head, two signs that are involuntary and permanent, even when this limitation conflicts with other claims in the handbook. The authors, however much they relied on stereotypes for practical material, reveal their own interests in the causal role of the environment.

Ps.-Aristotle (320–280 BCE)[23]

There are only a handful of ethnic comparisons in the handbooks attributed to Aristotle. The first treatise contains only one ethnic comparison, even though the author listed it as the second method after animal comparison (806b6ff). His comparison occurs in the discussion of coarse (or hard) and soft hair (*sklērotriches* and *malakon trichōma*), permanent involuntary signs. The primary analogy links hair texture to the animal kingdom, but he includes a supporting *comparandum* to peoples of the north and the south. The author relies on a broad division between northern dwellers (*oikountes*), who are "manly" (*andreioi*), and southern dwellers who are "cowardly" (*deiloi*). Because he does not discuss why the geographic types have the associated appearance and character, it is hard to tell if the author relies on basic common stereotypes, or if there is an underlying environmental assumption. One might argue that the use of the location expression (i.e., "northern dwellers") rather than simple ethnics supports an environmental basis. However, the animal comparisons that support the same inferences about hair texture have no geographic specificity and the fact that 'cowardly' deer are found in the 'manly' north suggests that if any environmental ideas underlying the sign system, they are limited to people. At the same time, the descriptive terms, the hard and soft, which are mapped onto manly and cowardly dispositions, suggest that gender stereotypes may also underlie the inferences.

The second half of the treatise takes no methodological notice of ethnic comparisons. It does, however, claim that "excessive blackness" (*hoi agan melanes*) indicates cowardice through analogy to Egyptians and Ethiopians; he also infers cowardice from excessive whiteness on analogy to women (812a11). The author uses this ethnic material exactly like gender and animal comparison. The ethnic categories are apparently little more than static stereotypes, lacking any explanation for the connection between the skin color and cowardice. He may also abstract even further from the ethnic stereotype of black skin to the color itself when he infers that excessively black eyes also signify cowardice (812b1). The only other reference to ethnic stereotypes occurs with the hair, where "very wooly" (*sphodra oulas*) signifies cowardice through analogy to Ethiopians (812b30). The ethnic material in Ps.-Aristotle is thus limited to static, uncontrollable signs of skin color and the hair of the head, and shows no interest in linking ethnic stereotypes to environmental factors. The minimal use made of ethnic

material belies its important place in the methodology, a fact that further shows a disconnection between principle and practice in these handbooks.

Polemon (c. 110–144 CE)[24]

The later handbooks all reflect the lost work of Polemon to a large, but impossible to determine, degree. Their methodological sections contain more extensive discussions of peoples based on cardinal geography, make use of some explicit environmental ideas, and also describe the pure Greek type (not found in Anon. Latinus). At the same time, these methodological remarks are largely divorced from the practical physiognomic analysis. Like Ps.-Aristotle, they associate ethnic types in the practical sections only with the static, involuntary signs of skin colour and hair on the head. For example, although the Leiden Polemon describes the body of the northerner as having "thick ankles, chubby bodies, good fatness, soft flesh and large bellies" (B31), he does not refer to northern peoples in sections discussing the shape of bodies; the section on the ankle (B7) contains no ethnographic references.[25] When the Leiden Polemon discusses the geographic types of peoples, he follows a similar procedure to his discussion of animals (B2): he provides a basic description of their physical features and mental dispositions without causal explanation. The Leiden Polemon also expands the description of the southern and northern types found in Ps.-Aristotle and includes eastern and western (B31).

Despite the greater interest in ethnographic material, the discussions in the Leiden Polemon show strange inconsistencies. The peoples inhabiting the south are "black, curly-haired, with thin heels, dusky eyes, black hair, and little flesh. They are tolerant in their actions and have cleverness, memory, lightness, opulence, much thought, lying, desire, and stealing" (B31). When the author turns from general principles to practical application, his analysis changes: "The color black is an indication of cowardice, long-lasting ambition, and dejection. Such are the people of the south, the Ethiopians and the Zanji, the people of Egypt, and what is near them" (B33). The description of the southern peoples just preceding this analysis does not associate them with ambition and dejection or cowardice, but describes them as "tolerant in action" with "cleverness, memory, lightness, much thought, lying, desire and stealing." There is a remarkably consistent physiognomic tradition connecting the cowardly southerner stereotype with black skin color. This consistency in the practical advice of the handbooks comes at the expense of internal consistency of Polemon's work. The Leiden Polemon advances the unsystematic and disconnected relationship between the theoretical discussions and the practical uses made of ethnic material found in all the handbooks.

The Leiden Polemon confines his practical discussion of signs primarily to skin color and hair. In respect to hair, he repeats the connection of curly hair to cowardice, and adds the confusing statement that this type of hair is found in "nations and lands" (B37). It is not clear how this statement fits, or if he means that the feature is widely dispersed or found primarily in southern lands, which he earlier associated with curly hair, although not with cowardice or desire. Black hair is also associated with cunning and deception, while "fine red hair that turns toward whiteness" is associated with "Slavs and Turks" and signifies "lack of understanding and knowledge and an evil way of life" (B37). However the Slavs and Turks entered into the text (Adamantius associates excessively yellow and pale white hair with Scythians and Celts as a sign of ignorance, clumsiness, and wildness, B37), there is a significant disconnection between the discussion of the types and the signs.[26]

In his general discussion of ethnic types, the Leiden Polemon comments on ethnic difference in geographical terms. He mentions that very few peoples of Egypt are intelligent or knowledgeable, while intelligence can be widely found among the peoples of Macedonia

(B31). It is not clear from this statement what Polemon's opinion would be of Macedonians who were born and lived in Egypt. He claims that the peoples of the north and south are opposites and that the middle is the best (B31), although again it is not clear if this is environmental or based on looser modes of binary thinking. The clearest environmental ideas come from his interesting discussion of the peoples of the coast and hinterland (B31). The coastal people are similar to the southern peoples; the hinterland, to the northern. Most telling is his description of the people from India:

> . . . the people of the land of India are not very different from the people of the south because of their closeness to the sea and because of the similarity of the produce of their land to that of the people of the north. For this reason their bodies and faces are beautiful, and their figure is evenly proportioned (B31).

The environmental ideas in the Leiden Polemon function within a traditional mode of thinking, favoring the middle between extreme environments. The ideal Greek type, like the Indian, results from its participation in the middle (B32). The Indian achieves it through a "northern" diet, although living in a "southern" environment. And yet, these more complex environmental ideas do not find expression within the practical discussion of signs, where no Indian is mentioned.

Adamantius (300–350 CE?)[27]

Adamantius contains similar ethnographic and environmental discussions of peoples who are located on the cardinal points, although there are significant differences in the role played by the environment. At the same time, Adamantius shows a similar disconnection in his principles and in his practical explication of somatic signs. Although his practical explication of the signs from skin color contains no ethnographic comparisons, he refers back to his earlier methodological discussion: "It is clear from the previous discussion that black skin reveals cowardice and inventiveness (*deilian kai polymēchanian*) while white and pallid (*hypoxanthos*) tells of courage and spirit (*alkēn kai thumon*)" (B33). Cowardice is traditionally associated in these sections with black skin just as courage is associated with white. And yet in his previous discussion, Adamantius assigns neither cowardice to the black southerner nor courage to the white northerner. The second terms, "inventiveness" and "spirit," do not have a place in the earlier discussion. He also does not mention any peoples when he explains that curly-haired men are cowardly and wily whereas straight-haired men are wild and mindless, both traditionally based on ethnic comparisons. The largest and most striking disconnection between methodology and practical explication stems from Adamantius' clear distrust of ethnic comparisons, a distrust rooted in environmental ideas.

In his discussion on the signs derived from skin color and hair (B31), he remarks that these signs are unreliable on their own because of ethnic mixing (*dia to epimemichthai allēlois tous apo tōn ethnōn*). He does not appear to be referring to miscegenation, but population mobility. His description of the northern and southern types follows the standard stereotypes, but he claims individuals follow the stereotypes to the degree that they separated from the north and south.[28] The environmental basis becomes even clearer at the end of the section when he comments:

> The south contains for the most part a mixture of dryness and heat but the north, wetness and cold. To the extent that the rest of the lands are situated near each, they

> partake of the mixture and produce, along with all the rest, people who are structured in form and character according to the logic of their individual mixture. The exception occurs in cases of variation when people have moved and taken up residence in different places (B31).[29]

Uniquely among the handbooks, Adamantius states a causal link for the geographic diversity of peoples, using the standard ideas of the hot, dry, wet and cold.[30] He also recognizes the idea that the effects of the environment on individuals will change if the individual moves to a new climate. This observation is all the more remarkable because few ancient authors consider the impact of migration on environmental determinist theories. It is tantalizingly unclear, however, if Adamantius believes that the Africans in Thrace or the Syrians in Italy experience both a physical and psychic change to match their new environment. Because he claims that population mobility renders the somatic signs unreliable, he seems to assume that a change of location breaks down the relationship between body and soul. This change could thus work in either direction: the black African in Thrace maintains the somatic signs of cowardice but becomes braver and more spirited due to the influence of the damp cold, or this same African becomes lighter skinned due to that same damp cold while still retaining his cowardly psychic nature. In any case, Adamantius mentions explicit causal links between environment and physiognomy. Despite all this innovation, he does not integrate his methodological remarks into his practical analysis.

Adamantius goes further than any other writer to ascribe environmental causes explicitly to the ethnic stereotypes. It is possible that these unique environmental ideas are in fact his personal contribution. In his statement on sources, he claims that he will include his own ideas (A1). And yet it is also possible that he is paraphrasing or reflecting material he found in Polemon. The Leiden Polemon contains a confusing reference in its explication of the pure Greeks to other peoples who "have become numerous among them, because people want them and their land, either for the pleasantness of their life and their moderate temperament and passion, or out of a desire for their knowledge, their good way of life and their laws" (B32). This passage in the Arabic translation may suggest that Polemon in his original handbook also discussed the effects of population movement on the signs derived from ethnicity.

Anonymous Latinus (350–400 CE)[31]

After Adamantius and the Leiden Polemon, Anon. Latinus provides a disappointingly limited and standard set of ethnic comparisons. He also lacks the broader methodological discussion of peoples found in Adamantius and the Leiden Polemon, while retaining the practical comparisons in respect to hair and skin color (14):

> Curly (*crispi*) hair reveals a person who is deceitful, timid, greedy, profit seeking; these inferences stem from comparison to Egyptians, who are timid, and to Syrians, who are greedy. Thick hair covering the forehead shows the excessively wild mind because it compares to the bear species. Hair above the center of the forehead that has grown toward the back of the head signifies an impetuous (*calidum*) and none too clever mind because it compares to the barbarian tribes (*gentes barbaras*) . . . Yellow, thick, and somewhat shiny (? *albidiores*) hair signifies a character (*mores*) that is un-teachable and un-tamable. It is compared to the German peoples (*gentem Germanorum*).

and (79):

> Species of skin color are an attribute of the races (*gentibus*). And so just as the races have their own character, so we must recognize the likeness from their colors. Black skin reveals an unwarlike, timid, and clever person: the comparison is to the inhabitants of the south, for example, Ethiopians and Egyptians; a whitish-red skin (*albus subrubens*) indicates brave and spirited men: the comparison is to the inhabitants of the north.

The discussion of hair interweaves analogies to animals and peoples. The analogies to peoples contain neither innovation nor causal links to the environment. Only the traditional ethnic comparisons appear in the discussion of skin color signs. Anon. Latinus does recognize that cultural factors can affect men's character. In pointing out the difficulty of making an accurate physiognomic analysis, he complains that men not only seek to hide their faults but that education and society (*studia et conversationes*) obscure human character, a fact that causes humans to have a multiform character where animal character is open and unguarded (132). The comparison to animal nature suggests that environment is not a key causal factor for Anon. Latinus, whereas culture and the rational part of the soul, elements he likely believes animals lack, disturb and confuse the natural somatic expression of individual character. His analysis thus seems to leave little space for the environment.

Conclusion

The sympathetic relationship of the soul and the body authorizes ancient technical physiognomy, which in turn makes frequent use of analogies to animals and ethnic groups in order to train their readers to discover the hidden inner character from external appearance. Despite numerous differences between the handbooks, they consistently limit their practical ethnic comparisons to skin color and the hair on the head, even when this limitation diverges from their methodological or generalized statements about ethnic character. They frequently display contradictions or disconnections between their broader claims about ethnic types and the traditional interpretations of the somatic signs in the practical sections. These traditional interpretations are based on very basic ethnic stereotypes of the cowardly southerners and courageous northerners. The traditional geographical divisions do not appear to be based on a consistent or extensive consideration of environment, but instead are ready-made, static stereotypes. Where the environment does appear clearly, we find it in the individual methodological or generalized discussions of the Leiden Polemon and Adamantius. The Leiden Polemon considers the environmental effects not only of north and south, but also the effects of coast and hinterland. His interest in the mean finds expression in the praise of the Indian, who partakes of a mixture of the south in his geographical location and the north in his diet. Adamantius adds the causal link between geography and the cold, hot, dry and wet to explain ethnic differences, but he also shows a remarkable interest in how population migration affects the environment's role in ethnic appearance or character.

Both the similarities and the differences among the handbooks suggest that environment was not part of the core tradition of ethnic comparison in technical physiognomy, which is represented by consistent practical analysis of signs. Instead, environment formed an important part of the perspective brought by the individual authors. These writers were working within a technical tradition that deployed basic ethnic stereotypes for skin color and hair without providing an explicit underlying environmental explanation for the stereotypes. Individual authors, however, brought their own ideas on the role of the environment, which they reserved for their methodological or general discussions without fully integrating them into their handbooks more broadly.

Notes

1 Some of the scope of physiognomic ideas can be found in Evans 1969, Barton 1994, Gray 2004, Porter 2005, Ziegler 2009. The scope is wide enough when we limit ourselves to what we might call theories of physiognomy, but when we include physiognomic practice and popular physiognomy (i.e., everyday, non-scientific attempts to interpret inner states from bodily signs), we find great diversity and scope.

2 The physiognomic handbooks and much supplemental material can be found in Foerster 1893. Swain 2007 contains, in addition to important essays on the handbooks discussed here, useful introductions, translations and texts, which I cite here: Swain for Ps.-Aristotle; Ian Repath for Adamantius and the Anon. Latinus. The translations here are my own, though based on Swain and Repath. The exception is Hoyland's translation of the Leiden Polemon, which I quote directly because I still have no Arabic.

3 The logical process is not deduction, but abduction (Sassi 2001: 69–73). George Boys-Stones, in his thorough investigation of the various complex philosophical approaches involved in relating body and soul, shows that the writers who take physiognomy seriously do so because they hold views about the relationship of the soul to the body that allow for it (2007: 20).

4 F. Stok (1998: 175–6) similarly concludes, based on the role of theories of the humors in physiognomy, that handbooks of physiognomy are distinct from the medical tradition.

5 For further analysis of the relationship, see the introductions to the texts in Swain 2007.

6 See the introduction to Vogt 1999. Boys-Stone argues convincingly that the two authors have different views on the precise way the body and soul relate (2007: 55–8).

7 For more on these figures, see the *Encyclopedia of Ancient Natural Scientists*.

8 Loxus (*EANS*, 512) is little more than a name to us. On Loxus' contribution, see Boys-Stone 2007: 58–64

9 Predictive physiognomy has been treated in Barton 1994.

10 Anon. Latinus suggests that both Loxus and Polemon include predictive physiognomy (133), although his example from Polemon is fragmentary and the text breaks off before revealing more.

11 Voula Tsouna similarly argues that physiognomy focuses on stable character to show how it differs from cynic philosophic discussions of the problem of knowing other minds (1998).

12 "In ancient philosophical contexts, the word [physiognomics] seems to be reserved specifically for the belief that appearance is a guide to innate as opposed to acquired characteristics" (Boys-Stone 2007: 21).

13 Lavater refers to static features as physiognomic and dynamic ones as pathogenic, but similar to Ps.-Aristotle, he limits pathogenic signs to the expression of temporary emotions. Bettini, in a chapter rich in relevant physiognomic observations, discusses identity from immobile and mobile aspects of the body and face (2013: 167–8). Evans adds to permanent and momentary features an "iconistic" sign, or the body taken as a whole (Evans 1969: 6)

14 See Ambrose, *de officiis ministrorum* (1.18.67): *itaque vox quaedam est animi corporis motus*. Francis Bacon *The Advancement of Learning*, Book 2 (1605) "The lineaments of the body do disclose the disposition and inclination of the mind in general; but the motions of the countenance and parts do not only so, but do further disclose the present humour and state of the mind and will."

15 It may seem odd to use the term 'physiognomy' in relation to modern scientific investigations of the inner states signified by bodily signs. The oddity stems from equating earlier physiognomy, at times comically pseudo-scientific, with contemporary *echt*-scientific practice. However, I use the term to cover the impulse to establish the expressive qualities of the body without evaluation of the validity of the particular practice.

16 Compare the "pathic sneeze" in Cleanthes' discovery of the hidden deviant (Diog. Laert. 7.173).

17 Obviously it is only one element mentioned in the *DSM-5* (*Diagnostic and Statistical Manual of Mental Disorders*, 5th edn., see APA 2013); diagnostic criteria for autism spectrum disorder and the newer criteria of *DSM-5* make distinctions between autism spectrum and social communication disorders.

18 We can look forward to the day when our computer will recognize our frustration, apologize and offer help; it is unlikely, however, to try to recognize our deviant sexuality from our face (especially when it knows our Internet search history).

19 The body can signify through gesture, for example, and a person can acquire numerous significant gestures over time, such as the many gestures I have learned to use in my trips to Italy. These acquired somatic signs would be a meaningful index of many aspects of my character, although these handbooks show no interest in such physiognomy.

20 "*Ex autou tou tōn anthrōpōn genous, dielomenoi kata ta ethnē, osa diephere taas opseis kai ēthē, hoion Aigyptioi kai Thrakes kai Skythai*" [*Phgn.*] 805a25.
21 "*Kai kata tas chōras ou smikrō tini dienēnochenai tois ēthesi tous anthrōpous eis deilian kai tolman ē to philē donon te kai phioponon, hōs tōn pathētikōn kinēseōn tēs psyches hepomenōn aiei tē diathesei tou sōmatos, hēn ek tēs kata to periechon kraseōs ou kata oligon alloiousthai.*" Kidd f.169.88–93 = Galen, *de Placitis Hippocratis et Platonis* 5.5.23.
22 See Kennedy and Weeda, this volume.
23 *EANS*, 149.
24 *EANS*, 678–9. The original of Polemon is lost. My discussion is based on the Leiden Polemon, an Arabic translation, edited and translated into English by Robert Hoyland in Swain 2007.
25 Translations of the Leiden Polemon are by Hoyland 2007.
26 On the use of Polemon in the Islamic world, see the essays of Hoyland and Ghesserti in Swain 2007: 227–325.
27 *EANS*, 30–31.
28 Following Foerster's emendation. See Repath 2007: 532 n. 104.
29 Following the emendations in Foerster's text. See Repath 2007: 532.
30 Lloyd 1964 discusses the uses of these pairs of opposites. See also Kennedy, this volume.
31 *EANS*, 665.

Bibliography

APA (American Psychiatric Association). 2013. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5®)*. Washington, DC: American Psychiatric Publishing.

Barton, Tamsyn. 1994. *Power and Knowledge: Astrology, Physiognomics, and Medicine under the Roman Empire.* Ann Arbor: Michigan University Press.

Bettini, Maurizio. 2013. *Women and Weasels: Mythologies of Birth in Ancient Greece And Rome = Nascere: Storia di donne, donnole, madri ed eroi* (Torino, 1998), Trans. E. Eisenach. Chicago, IL: Chicago University Press.

Boys-Stones, George. 2007. "Physiognomy and Ancient Psychological Theory." In *Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical Antiquity to Medieval Islam*, edited by Simon Swain, 19–124. Oxford: Oxford University Press.

Evans, Elizabeth C. 1969. *Physiognomics in the Ancient World*. Philadelphia, PA: The American Philosophical Society.

Foerster, Richard. 1893. *Scriptores Physiognomonici Graeci et Latini*, 2 vols. Stuttgart: Teubner.

Gleason, Maud. 1995. *Making Men: Sophists and Self-Presentation in Ancient Rome*. Princeton, NJ: Princeton University Press.

Ghersetti, Antonella. 2007. "The Istanbul Polemon (TK Recension): Edition and Translation of the Introduction." In *Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical Antiquity to Medieval Islam*, edited by Simon Swain, 465–86. Oxford: Oxford University Press.

Gray, Richard. 2004. *About Face: German Physiognomic Thought from Lavater to Auschwitz*. Detroit, MI: Wayne State University Press.

Hess, Eckhard. 1965. "Attitude and Pupil Size." *Scientific American* 212(4): 46–54.

Hoyland, Robert. 2007. "A New Edition and Translation of the Leiden Polemon." In *Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical Antiquity to Medieval Islam*, edited by Simon Swain , 329–464. Oxford: Oxford University Press.

Isaacs, Benjamin. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.

Lloyd, G.E.R. 1964. "The Hot and the Cold, the Dry and the Wet in Greek Philosophy." *Journal of Hellenic Studies* 84: 92–106.

——. 1983. *Science, Folklore and Ideology: Studies in the Life Sciences in Ancient Greece.* Cambridge: Cambridge University Press.

Porter, Martin. 2005. *Windows of the Soul: Physiognomy in European Culture 1470–1760.* Oxford and New York: Oxford University Press.

Repath, Ian. 2007. "The Physiognomy of Adamantius the Sophist" & "Anonymus Latinus, Book of Physiognomy." In *Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical Antiquity to Medieval Islam*, edited by Simon Swain , 487–548. Oxford: Oxford University Press.

Sassi, Maria Michela. 2001. *The Science of Man in Ancient Greece*. = rev. edn. of *La scienza dell'uomo nella Grecia Antica* (Turin, 1998), trans. P. Tucker with a foreword by G.E.R. Lloyd. Chicago, IL: University of Chicago Press.

Stok, Fabio. 1998. "La fisiognomica fra teoria e practica." In *Sciences exactes et sciences appliquées à Alexandrie*, edited by Gilbert Argoud and Jean-Yves Guillaumin, 137–87. Saint-Etienne: Publications de l'Université de Saint-Etienne.

Swain, Simon. 2007. *Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical Antiquity to Medieval Islam*. Oxford: Oxford University Press.

Tsouna, Voula. 1998. "Doubts about Other Minds and the Science of Physiognomics." *Classical Quarterly* 48: 175–86.

Vogt, Sabine. 1999. *Aristotles, Physiognomonica: Übersetzt und kommentiert*. Berlin: Akademie Verlag.

Ziegler, Joseph. 2009. "Physiognomy, Science, and Proto-racism 1200–1500." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 181–99. Cambridge: Cambridge University Press.

5

HEALTH AS A CRITERION IN ANCIENT ETHNOLOGICAL SCHEMES

Eran Almagor

Not surprisingly, we find the label 'healthy' (*hugieinos*, *salubris*) among the traits that mark ethnic groups in antiquity.[1] The stress on this quality is deeply rooted in the stereotypes various societies espouse, contrasting 'good' and 'bad' peoples, and dividing 'Us' from 'Them'.[2] Accordingly, some (psychological or bodily) diseases and illnesses are portrayed as afflicting certain groups in particular and not others, thereby serving to demarcate societies. This concept of health as a criterion of ethnic diversity in the ancient mindset, which marks groups to which members belong and to which they do not in ethnological schemes, is the concern of this chapter.[3] The discussion is less engaged with the ontological division of the known inhabited world to the well and the sick and the scientific explanations for it, but rather with the significance of this very division. If this chapter deals with causal effects that create the condition of health or disease it is only in so far as this change does not involve nature and climate zones but rather the intervention of man against environment.

The chapter will progress from a case in which health is identified as a simple constitutive ethnic criterion to examples that designate it as regulative and more slippery. The first section addresses a rare case study, in which the portrayals of both communities in question are either known or can be traced. In the case of the Israelite exodus from Egypt, we have both the biblical version, which attributes illness to the Egyptian population (in the ten mighty acts of God: Exodus 7–12), and a local Egyptian story explaining the departure of Jews from the country as ultimately resulting from their being afflicted by leprosy and other diseases. The two versions were cast in Greek garb intended for Hellenic audience, the first by Flavius Josephus in his *Antiquities* (*AJ*) and the second by the priest Manetho, preserved again by Josephus (*Against Apion* = *Ap*.). The second and third sections tackle stories or motifs that describe a division between groups according to their health condition but also portray a contact between them that both enhances this division and blurs it. The second deals with a western and northern group, the Celts, and is interested in the phenomenon of illness caused by the weakening consequences of wine absorption. The Celts' notorious inability to drink wine leads to disastrous bodily consequences for them when they are in Italy. The third section explores the eastern group of Persians and examines a case in which the self-acclaimed healthy Greek culture improves the condition of the 'Other' society and is said to cure its sicknesses through medicine and medical treatment. One may note that the diseases (especially in the last two examples) are associated with people being in the 'wrong space'—a space

other than their required geographic location: Celts should not be in Italy, and Persia's need for a cure marks it as an export from an ideal geographic space to an 'otherspace'.

Israelites and Egyptians face disease

The well-known biblical story of the Exodus from Egypt involves the division between the healthy Israelites and the diseased local population. Firstly, the so-called 'ten plagues' are generally presented as afflicting only the Egyptians.[4] The description of the first mighty act (Exodus 7:18, 24) specifically mentions "Egyptians" as loathe to drink water from the Nile as it turns to blood, while conspicuously avoiding any reference to the Israelites. The second has frogs swarming upon Pharaoh's 'people' and servants (7:29 [8:4], see also 8:4 [8:9]). It is only when the narrative reaches the fourth plague, namely the swarms of flies, that Moses is made to say that this will afflict the Egyptians (8:17 [8:21]) while the land of Goshen, 'in which my people dwell', shall be free from the pestilence (8:18 [8:22]).[5] The plague of murrain is said to affect the cattle of the Egyptians and not that of the Israelites, none of which dies (9:3–7). The plague of blains similarly is depicted as if inflicted upon the Egyptians alone (9:14–15), the thunderstorm of hail skips over the land of Goshen again (9:26). Similarly, the Israelites are exempted from the thick darkness that afflicts Egypt for three days (10:23: "all the children of Israel had light in their dwellings"). Secondly, the final mighty act that kills the first-born of all the Egyptians evades the Israelites, as a sign that "the Lord put a difference between the Egyptians and Israel" (11:5–7). This is because the Israelites follow God's injunction to strike the lintel and the two side-posts with the blood of the sacrificial lamb, making the blood a token for God to pass over their houses (12:12–13, 22–3)—the very basis for the Passover celebration over the ages.[6] According to this story, the very act that defines the Israelites as a group, namely, following God's commands (at least with respect to that day) is also what sets them apart as healthy. Correspondingly, on that day God not only imparts disease to one group but also protects the other from affliction (see Deut. 32:39); by these acts God delineates the two groups.

In his rendition of this story to a Greek-speaking pagan readership, Josephus (*AJ* 2.293–314) adapts it so that the ethnic diversity and the demarcation of borders between the 'well' and the 'sick' societies is more in tune with Greek precepts and notions.[7] This is evident firstly in the fact that the division between the populations is not done in accordance with territorial separation as in the biblical account (i.e. Goshen vs. Egypt), but according to ethnicity (Egyptians/Hebrews).[8] Secondly, in an elaboration of the biblical text, Josephus (2.294–5) goes on to interpret the first mighty act as creating a partition between Hebrews and Egyptians with respect to the waters of the Nile. Yet, this is affected according to ethnic affiliations. After Egyptians drink the blood-coloured water they are said to suffer pains and torment, but to the Hebrews "it was sweet and fit for drinking (*potimos*)."

How could this be? In order to explain this state of affairs to the Greeks, Josephus seems to employ notions associated with Hellenic thought, in an apparent allusion to Heraclitus of Ephesus' famous *dictum* that the sea is "the purest and most foul water" at the same time: to fishes it is drinkable (*potimos*) and brings safety, to humans undrinkable and damaging (Hippol. *Haer*. 9.10.5 = B 61 DK),[9] implying that the same thing produces opposite (well and sick) effects to different groups.[10] Another of Heraclitus' well-known sayings draws a line between two kinds of perception among humans, namely, that which attains understanding and that which does not, relying only on the senses. As it is attributed to Heraclitus, the phrasing is "Eyes and ears are bad witnesses to men if they have barbarian souls" (Sext. Emp. *Math.* 7.126 = B 107 DK).[11] While "barbarian" here may not be strictly an ethnic

designator, it certainly has affiliation with the later Greek division of humanity,[12] and definitely sets apart two groups within humanity according to mental discernment. The same phenomenon can easily be perceived differently by two groups of humans. Similarly, the division into the healthy and sick with respect to the first mighty act is made in correspondence with the mental perception of the water by the two peoples—one sees clearly, the other is deviant.[13]

The local Egyptian memory of the event was different. Unfortunately, original accounts of this version did not survive, or else were not even written down. The only version we know of was composed in Greek, and was attributed to the lost history of Egypt (*Aigyptiaca*) of the Egyptian priest Manetho, perhaps active under the rulers Ptolemy I and II (third century BCE).[14] According to several scholars, the version mentioned and cited by Josephus was not written by Manetho and has to be dated to a later period, the first century CE.[15] From the little we can discern from the fragments, the Greek character of Manetho's work[16] seems to outweigh its Egyptian nature.[17]

With regard to the reason Jews left Egypt, Manetho is said to claim the following (1.229–52):

> He inserts implausible stories, aiming to confuse us with the great number of Egyptian lepers and people who for other sicknesses (*plēthos Aigyptiōn leprōn kai epi allois arrostēmasin*) had been, he says, condemned to exile from Egypt . . . he then interpolates the fabricated king Amenophis, and claims that he wished to see the Gods . . . [This king], reporting this desire to his namesake Amenophis [the seer] . . . [was told] that he would be able to see the Gods if he purged the whole country of lepers and other polluted people (*leprōn kai tōn allōn miarōn anthrōpōn*). The king was pleased and gathered all the physically maimed people in Egypt (*ta sōmata lelōbēmenous*) (80,000 in all), and sent them to work in the stone quarries on the east of the Nile, insulated from the rest of the Egyptians. Some of those sick with leprosy were erudite priests, he says. Amenophis the wise seer feared the wrath of the Gods upon himself and the king if these people were seen to be oppressed, and added a prediction that some would associate with the polluted people and would control Egypt for thirteen years. Yet, he did not disclose this to the king, but wrote it down and killed himself . . .
>
> When those quarantined in the quarries asked to be released and find a shelter, the king granted them the deserted city of Avaris. From this place they planned their rebellion, appointing as their leader Osarsephon (later called Moses), a priest from Heliopolis. The latter ordered them not to worship the local Gods nor have contact with anyone but those of their community who likewise swore to uphold these laws. This people repaired the city walls and allied themselves with the exiled Egyptians who settled in Jerusalem [=Hierosolyma] (200,000 men) in a joint war against Amenophis. The king remembered the prophecy, and although he gathered some 300,000 warriors, he did not engage in battle but entered into Ethiopia for thirteen years. In the meantime, those who were recalled to Egypt, called the Solymites, together with the polluted people in Egypt, treated the population in a sacrilegious manner by setting fire to cities and villages, pillaging temples, destroying images of Gods, slaughtering sacred animals and humiliating the priests. When Amenophis returned with his men, he attacked these polluted men, and drove them out as far as Syria.

Josephus then goes on to conclude his disagreement with Manetho (2.253): 'We were not part of the Egyptians who were horribly diseased in body (*hoi ta sōmata lelōbēmenoi*), and Moses the leader of the people was not one of such men, but was born many generations earlier. . . .'

Manetho makes the disease a crucial criterion in the formation of the Jewish *ethnos*: this group was alienated from the rest of the society because of its physical condition, and this isolation paved the way to the nation's definition by a new belief system and set of practices. Only then did this group collaborate with alien forces, a population of previous exiles from Egypt, and was finally driven out of Egypt.

If we follow the logic of this depiction, we see that any Egyptian was susceptible to disease or other physical harm, and consequently of potentially losing his or her ethnicity. Indeed, even Egyptian priests were among the sick, as Manetho is said to report. Thus, the Egyptian version makes disease at once a rigid marker of ethnicity and a flexible one, enabling a dynamics of crossing over from one ethnic identity to another. Yet, the 'conversion' is effected in one direction only. The portrayal of sickness in this version is that of a gradual process, potentially endangering the well-being and ultimately the ethnic belonging of the individual Egyptian. The healthy portion of the society must constantly guard itself against it.[18] In the second stage of the story, the lepers, the disabled, and their allies rule over Egypt, so that the disease not only takes control of the body of individuals but also of the political body at large.[19] This depiction of disease marks it not only as a source of weakness but also the basis of great power: it increases the numbers of the group, lends it cohesion and, due to the segregation and oppression it suffers, forces the people to have unified political goals.

The biblical story also describes two stages in the tale of the departure of the Jewish people from Egypt. The first depicts a reverse picture, according to which the Israelites are isolated and oppressed by the Egyptians because of their different ethnicity, which is already defined as given and static; it allows no transition between the groups because the Israelites are immigrant, foreign 'others' who are geographically dislocated in Egypt. The second stage of this version echoes the story of Manetho. The two versions parallel each other in that obedience to divine commands is conducive to a group's health and marks it as ethnically different from the other. The command in the Bible is intended to correct the geographic displacement and restore the Israelites to their proper place. In both versions, the deity/deities choose the healthy group and favour a separation of the peoples along the lines of their health condition, a condition that eventually mirrors whether they are within or without their natural environment. At the second stage of the biblical story, the Israelites are re-defined as an ethnic group by the very measures that ensure their health and protection from the plague that kills all first-born children in Egypt.[20] Manetho's story is more logically consistent, for his group of Jews is initially defined by its health condition, and is literally created from an assembly of sick and maimed people. In another mode, the two accounts are the mirror images of one another. The healthy Israelites of the Bible are Manetho's sick people who have to be cast away.[21]

Parallel in the two versions is the response to the disease (present or imminent) and actions done by the others in order to preserve their well-being. These actions essentially create the respective ethnic communities: in Manetho's story the isolation of the sick by the majority of Egyptians, and in the Bible the marking of the lintel and the two side-posts with the blood of the sacrificial lamb by the minority in distinction from the surrounding ailing society. This presentation is a mindful display of Israel as 'Other'.[22] The peculiarity of the biblical story stresses the common threads the Egyptian version shares with the Greek outlook. It is the external point of view that is adopted in the Bible, an 'allocentric' approach, so to speak—depicting the Jews as being 'Other' in the eyes of 'Others'—and not the internal ethnocentric one known from the Greco-Roman world and embedded in Manetho's story.[23] This change of perspective may explain many differences between the versions, but the element of the ethnic differentiation in accordance with health/sickness appears to be similar.

Celts and Italian wine

Having explored the manner in which ethnic groups can be demarcated in accordance with the criteria of health/disease in the ancient world view, let us examine the next two instances of this division in which interaction between members from healthy and sick societies is central and where there is a dislocation either from the periphery to the centre or the centre to the periphery. The two examples concern Celts and Persians, in two different extremes of the known world. In the Greek ethnological scheme, each of the ethnic and geographic poles of humanity was deemed 'sick' in its own way because of its flaws. First the Greeks (see Artist. *Pol*. 7.1327b29–33) and later also the Romans (see Vitr. 6.1.10–11), were situated between these poles, both geographically and in terms of the mildness of character that merges the good traits of both types of peoples.

According to classical Greek stereotypes, barbarians are divided between the overly (decadently) refined and the exceedingly wild and savage. The difference corresponds to their areas and zones of dwelling, as put succinctly in the Hippocratic treatise *Airs, Waters, Places* (16) and by Aristotle (*Pol.* 1327b18–33l). The peoples living in the frosty climate of Europe are full of courage and therefore remain independent. Features of audaciousness (*thrasutēs*) and boldness (*thumos*) are frequently assigned to them.[24] However, lacking understanding and ability, they are deprived of political institutions; they are also incapable of governing others (*eleuthera men . . . apoliteuta de kai . . . archein ou dunamena*). On the other hand, the inhabitants of Asia are clever but deficient in spirit and are habitually differentiated by their softness (*malakia*).[25] The Asians, thus, are perpetually in a state of submissiveness and servitude (*archomena kai douleuonta diatelei*). The Celts fall into the former category, the Persians the latter. Let us examine these two ailing peoples.

The story of the entry of the Celts into Italy and Rome, and their departure (or banishment) as related to the effects of wine, appears in several classical sources. In this tale, wine variably invites the Gauls into Italy and ultimately leads to their weakness and expulsion from Rome. The result of this encounter between the Italians and the Romans determined later associations of the Celts with excessive drinking and other vices associated with this behaviour. This stereotype is echoed in Polybius (2.19.3–4):

> On arriving home [from Italy], they came to blows with each other about the distribution of the loot and ended up devastating a large part of their men and of the spoils. This is quite frequent among the Celts, when they seize their neighbours' possessions, primarily because of their unwarranted drinking and greed.

Who is to blame for this outcome? One answer would be that the Celts were sick to begin with, as opposed to the healthy Romans and Italians, a sickness associated with their place of origin and their dislocation into Italy. The eventual weakness resulting from the consumption of wine, in a subtle comparison with the Romans' manner of handling it, seems to insinuate the Celts' inherent feebleness and their disposition to be afflicted by this beverage and consequently become ill.

The presentation of the Celts' susceptibility to sickness from wine depends on several commonplaces in ancient ethnographic descriptions and is built upon certain stereotypical motifs. Firstly, their physique was distinctive. A consensus among ancient writers depicts them as immensely large.[26] Diodorus (5.28.1) claims that "the Celts (*Galatai*) are tall", Strabo (4.4.2) states that "as for their strength, it arises partly from their immense figure",[27] while Ammianus Marcellinus (15.12.1) maintains that, "almost all the Celts (*Galli*) are of tall stature. . . ." This uniformity in the sources is in keeping with the supposition in texts like the Hippocratis *AWP*

and Vitruvius that the consistently cold climate of the north causes uniformity in body type among the inhabitants.[28] In this way, the Celts were not different from other populations at the extreme edges of the world. Their largeness might also be considered among those types who were perceived as having often bizarre physical features, situating them close to animals, on the threshold of humanity. Well known are the dog-heads (Kynokephaloi), placed by Herodotus in northern Africa (4.191), but transferred by Ctesias to India (*FGrH* 688 F 45.37–43; see also Gell. *NA* 9.4.9; F 45oβ; F 45pα; F 45pβ), where they are described as a group of people with canine heads who bark like dogs.[29] Another group is that of the 'Skiapodes' ('Skiapods'), who fall on their backs and let their extremely wide feet provide shade for them against the sun. Ctesias places them in India (688 F 51a,b, 60), while Hecataeus (*FGrH* 1 F 327) and Antiphon (Suda, Σ 601, see also 600), locate them in Libya.[30] Herodotus mentions a tribe of 'headless men' (*akephaloi*) in Libya (4.191), with their eyes set in their chests (see Plin. *HN* 5.8.46). He also portrays the unique physiques of humans in the north (4.25), as told by 'the bald-headed men' (*phalakroi*); for instance, the mountains are inhabited by men with goats' feet. Thus, the Celts, with their physical difference determined by their peripheral geographic origins, were understandably impacted differently by Italian wine than the Romans.

Secondly, the Celts were seen to be both uncivilized but corresponding to the Roman view, entirely capable of transforming their manners into those of advanced nations, such as the Romans.[31] Thus, for example, Strabo can on the one hand mention the fact that the Celts, like the Iberians, sleep on the ground (3.4.16, 4.4.3) to indicate their barbarity, while on the other hand, the fourth book of his *Geography* abounds with examples of Celts whose customs completely altered as a result of the Roman presence. The new rulers of the land introduced the peace, stability and leisure necessary for the adoption of the progressive markers of a civilized nation.[32] Presumably, Romans could lead the Celts to improve their lives because of the latter's weakness. The failing, which precluded them from maintaining political institutes themselves, stemmed from their nature and backward character; it may also have derived from their unique physique, which set them apart from other societies.

The Celts' entry into Italy and Rome demonstrates their inherent difference and their dislocation. Some ancient authors attribute internal factors to the first wave of the Celtic migration to Italy, such as overpopulation in their country, which was not able to sustain them all (see Plut. *Cam*. 15.1; see also Polyb. 2.17.3 and Diod. Sic. 14.113.1–3).[33] Other authors (Livy 5.33–5, Trogus *ap*. Justin, 20.5.7, Plut. *Cam*. 15.3–6) separate the Celtic invasion into Italy chronologically from the events leading to the capture of the city, and ascribe an external cause to the Celtic migration, namely, wine. Thus, Livy (5.33.3) claims: 'It is said that this nation, attracted by the report of the delicious fruits and especially of the wine, a pleasure new to them (*nova tum voluptate*) crossed the Alps and took possession of the lands formerly cultivated by the Etruscans.'[34] Thus, it was the Celts' acquaintance with Italian wine that disrupted their quiet life and made them lead their families into the land that produced this wonderful beverage. The person who allegedly introduced wine to the Celts and led them into Etruria was an Etruscan named Arron/Arruns,[35] who, according to one version, was harmed by his home community.[36]

After the Celts occupied most of the city of Rome, wine became one of the causes for their weakness (Plut. *Cam*. 23.7). This fact appears in Livy (5.44) as part of Camillus' speech.[37] Dionysius (*Ant. Rom.* 14.8) describes the outcomes of wine drinking among the Celts in the narrator's voice:

> There, as all gorged themselves with much food, drank much unmixed wine . . . took more sleep than was their custom, and spent most of their time in the shade, they

> gained so rapidly in corpulence and flabbiness and became so womanish in physical strength that whenever they undertook to exercise their bodies and to drill in arms their respiration was broken by continual panting, their limbs were drenched by much sweat, and they desisted from their toils before they were bidden to do so by their commanders.[38]

The narrative continues with an emphasis that the Celts suffered from a lethal disease during the occupation of Rome (*nosos hupoikourēsen autous*: Plut. *Cam*. 28.1; *Gallos pestilentia*: Livy 5.48). With the simultaneous suffering of the besieged from famine, both parties sought compromise. Eventually, the Celts abandoned the city, but were cut down by Camillus' forces (Plut. *Cam*. 28–9; Livy 5.49). Even though the Celts left Rome, the effects of wine on them were long-lasting and significant, as described by Diodorus (5.26):

> The Celts are exceedingly addicted to wine (*katoinoi*) and fill themselves with the wine which is brought into their country by merchants, drinking it unmixed, and since they partake of this drink without moderation by reason of their craving for it, when they are drunken they fall into a stupor or a state of madness (*maniōdeis*). Consequently many of the Italian traders, induced by the love of money that characterizes them, believe that the Celts' love of wine is their own godsend.[39]

Their addiction to wine had the following effects on the Celts: it debilitated them, caused madness and lack of sound judgement, disrupted their sleep, and impaired their senses. Even though the Celts invaded Italy, the country's civilization, embodied by the wine, invaded them as a malady. The connection between diseased bodies and peoples out of their geographically appropriate space seems evident.

The transportation of wine as a transmission of disease between two bodies is linked with literary presentations of the occupation of Rome (and Italy) as being at once a constant change of outer formations for the same group of Celts and an altered inner constitution for the Romans.[40] The Celts invaded and mastered the land that had been previously occupied by the Etruscans. The earlier names of the eighteen cities of the Etruscans remain, but the inhabitants have changed (Plut. *Cam*. 16). Here a new content (Celts) fits an old structure (site and cities), which is maintained, though its material embodiment has altered. Yet, even in this new land, the Celts resumed living a peaceful and pastoral life, the exact same way of life they pursued when they occupied their previous country. To use the imagery of wine, which is predominant in the story, we have here either New Wine in Old Wineskins or Old Wine in New Vessels. And yet, they are not the same Celts.

The mention of an actual disease together with the impacts of wine among the Celts is perhaps not accidental. Dionysus, the god of vines, winemaking and wine, was regarded as 'epidemic' in several senses of the word. He is a god who arrives in the land he visits (literally, *epi-demic*) in a sudden epiphany.[41] For example, Pausanias (1.2.5) mentions Dionysius' epidemic presence (*tēn . . . epidēmian tou theou*) announced in a Delphic oracle in the days of Icarius. In another sense, Dionysius brings unexpected collective madness, which spreads like an epidemic, a contagious and overpowering disease.[42] Another example, Euripides, *Bacch*. 353–5, mentions, "this effeminate stranger, who introduces a new disease to women" (*ton thēlumorphon xenon hos espherei noson kainēn gunaixi*).[43] The disease that afflicted the Celts is Dionysiac, making its appearance almost as abruptly as the Celts themselves do in Italy and presumably occurring when their bodies are already enfeebled from wine. The abruptness of the disease is also manifest because the Celts' infection was seemingly

not caused by the ostensible 'healthy' society of the Romans. This Dionysiac disease was almost necessitated by the general unrestrained barbaric behaviour of the Celts, reflecting their immoderate body and intemperate climate, thus explaining their drinking of unmixed wine, a practice which was known to cause pains and illnesses.

The fact that the Celts were eventually sick from wine and generally indisposed might indicate another interpretation of the encounter between them and the Italians/Romans. According to this understanding, it is not that the Celts were inherently unwell, but that the ailing Romans made them so. This reading goes along with the recurrent mention of disease among the Romans in this episode: Plut. *Cam*. 11.2 (Camillus loses one of his sons by disease); 37.1, 3 (Camillus is ill himself); 39.4 (Camillus claims sickness and resigns); 43 (a plague inflicts both common people and Roman magistrates, causing the death of Camillus). The affliction of individuals may indicate the diseased community of the Romans, insinuating the analogy between the private body and the body politic.[44]

This connection also corresponds to a tendency in ancient ethnography to highlight features that may be regarded as positive among populations living at the edges of the known inhabited world. These groups were often deemed simple and were idealized; their extreme locations in the *oikoumenē* also caused these traits to be exaggerated. For instance, Homer, *Il.* 13.1–6 describes Zeus as turning away from the Trojans and casting his eyes on the northern Thracians and Mysians, Hippemolgians ('mare milkers'), Galaktophagi ('milk eaters', 'milk-fed') and Abioi ('lacking resources or livelihood')—the latter specifically idealized as the "most just (*dikaiotatōn*) of mankind".[45] The verses were variously interpreted in antiquity in accordance with an idealization of the northern tribes of the "soft" primitivism type,[46] or of the "hard" sort (emphasizing the hardships in the savage livelihood) as well as cultural variation (a yearning for a savage state).[47]

"Simplicity" (*haplotēs*) and lack of sophistication is marked as a trait of the northern barbarians. The Scythians, for instance, are considered simplest (*haploustatous*), most economical and are more self-sufficient "than we are", claims Strabo (7.3.7). Anacharsis acquired a name as frugal and just (7.3.8). Strabo even claims that in view of the great injustice that exists "among us" concerning contracts, Homer rightly called "most just" people who do not need contracts or are engaged in making profit, but hold their property in common (except their swords and drinking cups, 7.3.7; see also 7.3.4). One example of the Celts' simplicity, according to which a group of this people responded to Alexander that they feared nothing at all, not even the Macedonian king, except the sky falling on their heads, is explicitly mentioned by Strabo (7.3.8; see also Arr. *Anab.* 1.4.7). While Strabo states that the Romans stopped the Celts' barbarous human sacrifice practices (4.4.5), which are "opposed to our customs", he does acknowledge that the negative demeanour of certain tribes, like the Scythians, is a direct result of a contact with "our way of life" (7.3.7).[48] These "noble savages" should be kept far from the corrupting effects of civilization, in order to maintain their simplicity and moral purity.[49] In the case of the Celts, such a geographic separation also maintains health.

This section addressed again the presence of an ethnic difference according to the criterion of health, which is preserved in the case of the interaction of Celts and Romans. Yet, this example also shows that while the fact of the division is sustained, it is not entirely clear who counts as healthy and who as sick between the two societies. Are the diseased sick because of their own failings, or is this a simple case of an infection of a healthy people by an unwell community? Or does disease arise only when the peripheral people attempts to relocate to the centre and utilize the natural produce of its land? If the Celts remained in their own space instead of entering an 'otherspace,' would they be free from the effects of Roman wine? Once again, health and disease serve to mark groups as well as blur the borders between them.

Greek physicians and sick Persians

In our final test case, we examine how medicine acts in a similar fashion to the wine, except that it shows a reversal: instead of peripheral peoples being diseased by the products of the centre, the centre exports health to the periphery; the ideal climate and geography of Greece allows its exports to 'correct' the ailments of those peoples located in less ideal lands.[50] Moreover, medicine also acts to blur boundaries between the two societies by this transformation. Both examples (Celts and Persians) show how important the basic distinction between health and disease is as a criterion in the ethnic differentiation. Achaemenid Persian society was typically portrayed as sick or diseased in Greek, especially Athenian, literature of the classical period.[51] The very concept of decadence applied to the fourth-century BC Persian court implies a decline from a well-regimented condition into a deteriorated one. Among the famous examples of this picture of decadence one may note the following: Plato, *Leg*. 3.695ab dwells on the defective education given to Cyrus the Great's children at the hands of women and eunuchs, which made them either "full of luxury and licentiousness" or "mad with drink and depravity".[52] Xenophon (*Ages*. 9.5) portrays the Persian monarch as shunning heat and cold because of a weak character (*dia astheneian psuchē*),[53] imitating the life of the feeblest beasts.[54] The end of the *Cyropaedia* (8.8.8–14, 16) deplores the fact that the current Persians do not care for their physical strength as they used to do. While they still refrain from spitting or blowing their noses, they never discharge the moisture by labour and perspiration; in the past they took care to eat once a day, but now this meal lasts the entire day; at banquets they drink so much that they are carried out; their marches have become shorter; the king and court have been weakened by wine; their diet consists of various kinds of meats and pastries.[55] Isocrates, *Paneg*. 150–51 claims that the Persian way of life cannot produce an able general or a good soldier, since they pamper their bodies (*ta . . . sōmata . . . truphōntes*).[56]

This decadence is especially marked against an initial concern with the right diet and the right way of life. For instance, Xenophon's 'Cyrus' gathered in his palace physicians and items (such as instruments and drugs, food and drink) that would assist his soldiers in case of illness (*Cyr*. 8.2.24–5).[57] The Greeks believed that Darius had written on his tombstone: "I was capable of drinking wine and feeling well" (Ath. 10.434d). Yet, the ailing process was almost inevitable because of conquest, and due to the fact that Persia had become such an immense empire. By vanquishing the corrupt kingdom of the Medes, the poor and rough Persians soon emulated them in gratifying their own physical desires.[58] This idea is set most clearly as a paradox in Herodotus. At the end of the work (9.122), Cyrus warns his soldiers that "from soft countries come soft men". This passage contradicts the picture at the beginning of the work (1.126), where Cyrus persuades his men to revolt against the Medes by showing them the good life, abundant with wine and feasting, which awaits them.[59]

Related to this sickness is the motif of a literally sick Persian monarch in classical literature. Herodotus claims that Cambyses "went mad" (3.33; see 3.38; see also 3.120: *Kambuseō nouson*), and mentions that some say that from birth he suffered a grievous illness (*nouson megalēn*), which some call the "sacred sickness" (i.e. epilepsy). In a famous description in Xenophon's *Anabasis* (1.1.1-2), which had already appeared in Ctesias' work, Darius II (born as Ochus) lies on his sickbed and wishes to see his two sons. Similarly, Athenaeus (12.548e) describes a picture in which a Persian monarch called Ochus rests on his deathbed and advises his eldest son how to rule.[60] Of the same type is the scene of the dying 'Cyrus' of Xenophon (8.7.5–28). Artaxerxes II is depicted as dying from grief and despondency (Plut. *Artax*. 30.9).[61] This sickness does not skip over members of the royal family: Atossa, the wife of Darius, suffers from a swelling in her breast (Hdt. 3.133); the body of Artaxerxes II's

daughter (and wife) Atossa is said to have been affected by leprosy (Plut. *Artax.* 23.4). The illness *motif* is almost a symbol and an allegory to the ailment that afflicts Persian society. As mentioned above, Greeks criticize the Persians' softness. One notable example is Xenophon (*Hell*. 3.4.15, *Ages*. 1.28) who mentions the Persians' soft and flabby bodies, being covered and hidden from the sun (See also Plut. *Cim*. 9.5).

We know that the Persian king invited foreign physicians to be part of his permanent staff at the court.[62] Although these included Egyptians, our sources mostly mention Greek doctors, enhancing a division between the image of sick Persia and healthy Hellas.[63] The first celebrated physician is Democedes of Croton at the court of Darius (Hdt. 3.125–38). After arriving at the court of Polycrates of Samos, Democedes was captured as a prisoner of war and became the Persian satrap Oroetes' slave (3.122–5). After his chance assistance to the Persian king, who twisted his foot severely, Democedes was made Darius' physician, receiving great honours and riches, a house in Susa and the title of the king's tablemate. Democedes also cured Atossa of the growth mentioned above, and during the course of a mission outside of Persia, he escaped.[64]

The second most well-known example is that of Ctesias of Cnidus, who composed the important history of Persia (*Persica*) and propagated the popularity of the image of the Greek physician at the heart of this disease-ridden kingdom. The first definite event related to Ctesias is his medical assistance to Artaxerxes II during the battle of Cunaxa and his treatment of his flesh wound (Plut. *Artax.* 11.3) in 401 BCE, for which he was later rewarded by the king (Plut. *Artax.* 14.1). Ctesias may have been called for service as he happened to be present at the scene of battle, presumably escorting the royal entourage. There is a striking resemblance between Democedes' story and that of Ctesias. Like Democedes, the Great King's wound provided Ctesias with the first opportunity to be of service to the king and while fulfilling a diplomatic mission for the king, he also escaped homeward. Diodoros (2.32.4 = *FGrH* 688 T 3, F 5) is the only source that mentions the circumstances that brought Ctesias to the Great King's service. He is also the only one who mentions captivity and its length (seventeen years).[65] It would seem more reasonable that Ctesias was employed under contract for a fixed term (till 398/7 BC), mainly taking care of the queen mother Parysatis.[66] Ctesias mentions two other physicians: Apollonides of Cos in the court of Artaxerxes I (F 14.34, 44) and Polycritus (Plut. *Artax.* 21.3) as a contemporary.[67] Interestingly, the three Greek doctors were reported to have saved the life of a male noble (Darius I: Hdt. 3.132, Megabyzus: F 14.34; Artaxerxes II: *Artax.* 11.3) while being employed in the service of women (Atossa, Amytis, Parysatis).

These stories of the presence of Greek physicians in the Achaemenid court not only emphasized Persia's chronic moribund nature, but also suggested the basic healthy character of Greeks, who could bring their knowledge and expertise in the field of medicine to benefit this society. Physicians thus acted also as cultural ambassadors, making medicine parallel to Greek *paideia* that is meant to be spread to barbarian nations. Yet, just as *paideia* was both a marker between the ethnic groups and a means to eliminate barriers between them, so was the practice of healing the 'Others.' A Persian, cured by Greek medicine was then, perhaps, less Persian.

Another factor that might have contributed to the removing of the boundaries between two societies through medicine is that, as in previous cases, the distinction could be reversed. The Persian view of the Greek physicians is unknown to us, except in so far as it appears in Greek texts. In these texts, we get the impression of a certain inversion of outlook, namely, a certain mistrust of the motives and behaviour of Greek doctors. With a tinge of irony, Ctesias related the story of the previous court physician Apollonides, which is preserved in this manner within the epitome of Photius (*FGrH* 688 F 14.44):

> Apollonides of Cos, the physician, advised [Amytis] who was sick—and despite the fact that she was ill and feeble he fell in love with her—and his advice was that she would fully get well if she had sexual intercourse with men because her illness affected her uterus. After he attained his aim and slept with her, Amytis' condition worsened and he stopped. On her deathbed she asked her mother to punish Apollonides and [her mother] told the story to Artaxerxes the king: how the doctor slept with her daughter, how he turned away after he had corrupted her, and how her daughter requested revenge. The king let his mother handle the matter [and she] incarcerated Apollonides, put him in chains, and tortured him for two months before burying him alive when Amytis passed away.

It is clear that Artaxerxes and the queen mother Amestris were appalled by Apollonides' demeanour and presumably blamed him for Amytis' deteriorated condition. It is not entirely inconceivable that the Persian royals were aware of these recommendations and treatments, and coupled with their biased suspicion, it may have struck them as a Greek design to weaken, rather than strengthen, the condition of Amytis, a member of the royal Persian family.[68] Their position could be compared to that of the Roman traditionalists, who suspected the Greek practitioners of medicine in Rome.[69] Markedly dissimilar to the Romans, however, Greeks were aware of the Persians' own practices of diet and regimen to preserve health. When confronted by diseases such as leprosy, for instance, they isolated and quarantined the lepers (Hdt. 1.138).[70] Greeks, and later Romans, acknowledged the medicinal wisdom of the Persian Magi concerning plants and stones.[71] Yet, for the Greeks to consider Persians as doctors would probably only be possible in an ironic reversal, of the kind mentioned in Plutarch's *Artaxerxes* and which only the Hellenes would find funny: 'With Timagoras the Athenian . . . the king was so pleased that he gave him ten thousand darics, and eighty milk cows to follow in his train because he was sick and required cow's milk. . . .'

Timagoras the Greek ambassador was infected with a disease in the ailing periphery of Persia. This tongue-in-cheek description of the royal gifts[72] depicts a world turned upside down, as luxury is meant to heal a disease, rather than be the cause (or symbol) for it. Another sarcasm, perhaps not lost on the Greek readers, is the Persian king's interpretation of the Hippocratic writings, and the recommendation to drink large quantities of cow's milk as treatment.[73]

Conclusion

This brief survey shows the importance of health as a criterion in ethnic division and ethnological schemes in antiquity, as displayed in three different examples. We saw that disease or its cure were associated with migration, invasion, or exportation. The only cure is depicted as a move from centre to periphery while disease is associated with periphery moving to centre, or transgressing borders. We began by examining the presence of this criterion in two clashing traditions concerning the departure of the Israelites from Egypt, and demonstrated how both versions underscored the fear of the healthy group of associating with the sick one. The biblical story is unique in adopting an allocentric approach, while the Egyptian-Greek one is ethnocentric. The next two cases discussed in this chapter exhibited the complexity involved in adopting the health criterion in an ethnological scheme. The examples raised questions regarding the issue of ethnic and geographic boundaries, whether they could be transgressed and in what manner, either through infection or medical treatment. They also called attention to queries regarding both the extent to which the advanced society was indeed morally

and socially sound and the very assumption that the more 'primitive' nation is indeed weak. Finally, they highlighted the Greeks' sensitive portrayal of the point of view of the 'Other'—almost an emic approach—in questioning how the medical practice, which is considered typically Hellenic, was perceived by outsiders. It is no coincidence that all these sets of questions formed the basis for intellectual study or a literary genre known as Greek ethnography, thus showing an important link that subsisted in antiquity between this scientific practice and concerns which properly belonged to the field of medicine and were embedded in them from the beginnings of both genres.

Notes

1 Thus, for example, in the Hippocratic treatise *De aera, aquis, locis* (*Airs, Waters, Places*), concerned with the influence of environment on health, some types of climate (e.g. in Asia or Greece: 5) are discernible as producing healthy animals, plants and peoples (portrayed by physical traits and by being energetic, strong, or clever). See Romm 2010, 220–21 and Kennedy, this volume. Herodotus 2.77 believes that the Egyptians are the healthiest of all men after the Libyans, for reasons of climate and diet. See Thomas 2000, 29–54. Onesicritus (in Strabo 15.1.34), describing the country of king Musicanus, comments on the health (*to hugieinon*) of the Indians and their longevity of life. Sallust *Iug*. 16.5–6 mentions the Africans as healthy of body (*genus hominum salubri corpore*).

2 See Hartog 1988, 49–57, 258–60, 367 on binary divisions. That these epithets were not applied as specific scientific ideas can be seen, for instance, in the use of the 'sick' society, as in Euripides' 'diseased Greece' being the cause for the Trojan War (*IA* 411).

3 It would seem that by definition, an ethnic group, a nation, tribe, or people share two features. In one sense, it is an entity which is different from other 'natural' groupings. This is true whether it is an 'imagined community' (Anderson 1986, 15), in which its members do not know each other yet share a strong feeling of belonging and identification, or a 'presumed identity' ('Geglaubte Gemeinsamheit', see Weber 1959 [1922], 237), which forms the basis of such a group in the political sphere. It has been argued that these groups are defined by 'fictive kinship' (Yelvington 1991, 168). See Gellner 1972, 169. In another way, unlike any other non-natural group, membership in an ethnicity is not voluntary since every person is a member by birth in some ethnic/national/tribal group and that it encompasses future generations as well (see Epstein 1978, xiii–xiv). Moreover, unlike other non-voluntary groups, this membership can enforce a totality of all its cultural symbols. See Isajiw 1974, 115–22; Glazer and Moynihan 1963, vi. Corresponding to its dual nature, the criteria are viewed as objective (e.g. race and other genetic distinctions) or subjective (defined in a process by which individuals identify themselves as different from others and as belonging to a distinct group). Compare Zenner 1985, 117 with De Vos 1975, 5–7 and Smith 1986, 21–3.

4 See Hort 1957 for a suggested explanation for this distinction.

5 Goshen is generally seen as the eastern side of the Nile's Delta. See the theories of Gardiner 1918; 1924, 94–5 and Naville 1924, 19–32.

6 See Jos. *AJ* 2.313, 3.249, 14.25. See Ps.-Philo, *LAB* 13.4 with Jacobson 1996, 1.510. See Jos. *AJ*. 17.213. See Segal 1963, 78–113 and Colautti 2002, 185.

7 For a comparison between the texts see Feldman 1998, 67, 86–8 and 2000, 216–25. A cursory comparison *of AJ*. 2.311–19 with Exod. 11–13 reveals that Josephus' account is markedly briefer (Josephus omits the fifth plague). See also Colautti 2002, 23.

8 See also Houtman 1996, 61. Josephus even openly says that the plagues befall the 'people' of Egyptians: *AJ* 2.301. Josephus' emphasis on the role of the nation of Egyptians in comparison with the biblical MT text can be seen throughout. Compare Exod. 10:7 with *AJ* 2.313 and Exod. 14:5 with *AJ* 2.320. See Ps.-Philo *LAB* 10.2, 10.6.

9 See Sextus Emp. *Pyr*. 1. 55.

10 See also Philo *De Vit. Mos*. 1.26.144. See Feldman 2000, 217 n. 773. See Houtman 1996, 29 for other answers concerning the condition of the Israelites at the time of the plague.

11 See Stob. *Flor*. 4.56; Diog. Laert. 9.7.

12 Hall 1989, 7.

13 It may be that this distinction has to do with the Hippocratic relationship between water and health. See *Aer*. 7 and Jouanna 2012.

14 See Plut. *De Is. et Os.* 361f–362a. See Ryan 2000, Kraus 2006. The work was used by the Christian chronographical compositions of Sextus Julius Africanus (third century CE) and Eusebius of Caesarea (fourth century CE), both cited by the ninth-century Byzantine scholar Syncellos.
15 See Schäfer 1997. According to this view, it is possible that copies of Manetho's text were edited and interpolated, for instance, equating Osarseph with Moses (*Ap.* 2.250 = *FGrH* 609 F 10a). The anti-Jewish motifs similar to those found in the sections attributed to Manetho are known from the later works of other Greek-Egyptian writers like Chaeremon, Lysimachus and Apion. See also Diod. Sic. 34.1.2; Just. *Epit*. 36.2; Tac. *Hist*. 5.3.1. See Gager 1972, 116–22.
16 See Laqueur 1928. See also Mendels 1990 and Dillery 1999.
17 This element has to do with the Egyptian king-lists. See Redford 1986.
18 Freedom of choice seems to be absent also in the second stage, when the secluded group rebels against the king and collaborates with foreigners in fulfilment of a prophecy.
19 This leprosy in Greek sources may not be the same as what is known as Hansen's disease. See Grmk 1989, 152–76, especially 160–63. See also Browne 1970.
20 While this is their final and more crucial demarcation, it should be remembered that as a people they were already oppressed by the Egyptians beforehand.
21 Without committing to a solution for the question of priority between the local Egyptian and the Israelite versions, we may note that in Moses' first interview with Pharaoh, one of the signs for his authority as a divine messenger is a demonstration of his contact with the deity through a display of God's ability to heal illness from leprosy (or another skin disease), which affects Moses' hand ("leprous as snow": Exod. 4:6–7). Thus, even in the Bible, at some stage of editing (this section is considered coming from the Yahwist source), a detail hinting at a sick Moses was included in the story. LXX and Jos. *AJ* 2.273 only say "as snow"/ "white", respectively. Josephus also denies this in *AJ* 3.265–7. See Hulse 1975 and Sawyer 1976 on the nature of the biblical skin disease. See also Num. 12:9–15 (Miriam).
22 On one level, all nations apart from Israel are regarded as 'others', first and foremost from the point of view of divinity. The other nations are depicted as not accepting God's special laws, intended for the chosen people. Yet, on another stratum, perceived from a human, rather than divine, viewpoint, the Jews acknowledge their own being as the 'others' by virtue of their being the 'special' group, God's chosen people.
23 This presentation corresponds to the emphasis most evident in exilic Jewish writings to emphasize the modes Jews are different, portraying them as distinguished from the surrounding society and religiously and morally different from the Gentiles in their following the laws of the 'Torah' in the Diaspora state in foreign lands. For instance, in the book of Tobit, the eponymous hero singles himself as 'other': He refrains from eating the bread of the Gentiles (Tobit 1:10–12). The Greek Additions to Esther depict the queen as acting contrary to the prevailing law in order to save her people (Addition b, 15–16; see also Addition c, 14).
24 See Irby in this volume and Schmidt 1999, 69–104, 240–44. See also Plut. *Mar*. 11.13, 16.5, 19.4, 9, 23.3, 7, *Caes*. 18.1, 19.6–7, 24.5–7, *Cam*. 23.1, 36.3, *Crass*. 9.8, 25.8, *Sert*. 16.1–2, 9–11.
25 See Plut. *Luc*. 11.7–8, 25.5, 28.5–6, 31.7–8, 36.7, *Cim*. 12.7, *Them*. 16.6, *Arist*. 10.1, 16.4–5, *Alex*. 33.8, 63.4–5. See also Schmidt 1999, 212–19.
26 In Roman art, northern peoples were portrayed with distorted bodies, large and over-muscled. See Ferris 2000.
27 See Polybius 2.15.7.
28 See Irby and Kennedy, this volume.
29 See Aeschylus and Hesiod *ap*. Strabo 1.2.35. See also Lassen 1874, 659–61, Fischer and Wecker 1924, col. 26; Shafer 1964; Lindegger 1982, 55–62; Karttunen 1989, 181–3; White 1991, 28–9, 48–50, 71.
30 See Philostr. *VA* 6.25 and Scholion on Ar. *Av*. 1533. See Pearson 1939, 96. In the original image, this people had one leg ('Monopods' in Strabo 7.3.6).
31 A process reflected in Caesar's ethnographic sections of the *Bellum Gallicum*. See also Spencer, this volume.
32 For example, the Turdetanians in Iberia have completely changed over to the Roman way of life (Strabo 3.2.15). See also the Cavari (4.1.12). See Woolf 1998, 52–3 and Almagor 2005, 53. See Thompson 1979, 213–29 on the concept of progress in Strabo.
33 See Appian *Gall*. Fr. 2. See Rankin 1987, 103–8.
34 Translation by Rev. Canon Roberts, *The History of Rome*, London: J. M. Dent & Sons, 1912, slightly changed. Similarly, Plutarch: "But at last they got a taste of wine, which was then for the first time

brought to them from Italy. They admired the drink so much, and were all so beside themselves with the novel pleasure which it gave, that they seized their arms, took along their families, and made off to the Alps, in quest of the land which produced such fruit . . . " (Translation from the LCL series). See also Dion. Hal. *Ant. Rom.* 13.11.1. The tradition probably went back to Cato (if the suggestion made by Peter 1914, 65, to relate the fragment of Gell. *NA* 17.13.4 = Cato, *Orig*. 2.5 Chassignet to this story is correct).

35 Arruns in Livy 5.33.3–4; See Dion. Hal. *Ant. Rom.* 13.10.1–2. A different name is mentioned by Pliny *HN* 12.2.5 (Helico), who makes him a Helvetian, a Gaul, with no use for an intermediate group, like the Etruscans. He was from Clusium according to Livy 5.33.3. Plutarch distances him from that city, and transfers him to another place (presumably in the Po Valley) as well as backward in time. See Williams 2001, 105–6.

36 Arron was guardian to a young person, called Lucumo, an orphaned rich boy who was in his custody but who was engaged in a corrupting activity involving Arron's wife. See also Livy 5.33.3. Dion. Hal. *Ant. Rom.* 13.10.1 has Arruns as the guardian of the son of Lucumo. In all versions, the boy seduces Arron's wife. On this figure in Etruscan mythology, see Heurgon 1961, 274, 283–5. When the young man tried to openly detach Arron's wife from his former guardian, Arron brought the case to trial, but was defeated, because of the multitude of the young man's friends. Arron left his city and went straight to the Gauls, apparently disappointed from any form of legal or restrictive action in inviting the Gauls to Italy. Dion. Hal. *Ant. Rom.* 13.10.3 has Arron pretending to travel on a trading journey.

37 ". . . Gorged with food and wine hastily swallowed, when night comes on they stretch themselves indiscriminately, like brutes, near streams of water, without entrenchment, without guards or advanced posts" (trans. Roberts).

38 Translation from the LCL series, slightly altered.

39 Translation from the LCL series, slightly altered.

40 See Almagor 2013.

41 And whose invasions of foreign lands altered those lands in ways that could be construed as changing their identity; see Kosmin 2013. See Detienne 1989, 3–4, 39, 63.

42 See Kerényi 1976, 139. See Jouanna 1990.

43 See Girard 1977, 499; Segal 1982, 50; Mitchell 2012, 29–30. On madness caused by Dionysius, see Detienne 1989, 7, 13–24, 31, 64.

44 This analogy essentially goes back to Plato's comparison of the soul and the *polis*, so that the state is a macrocosm of the man (see *Grg*. 503d5–505b12, *Resp*. 2.368c–9a; 4.434d–45e; 5.462c–e; 8.544d–5c). See Neu 1971; Ferrari 2003. Camillus' death from disease subtly evokes the comparison of politicians to physicians earlier: Plut. *Cam*. 9.3.

45 Homer calls the Ethiopians 'blameless' (*Il*. 1.423). Indeed, Strabo 17.2.1 describes the extreme southern part of the world, i.e. in the southern *eschatiai*, as poor persons.

46 That is, these groups live without a settled abode in a blessed land that produces all fruit without any cultivation (see Antiphon, DK 80 F 43). Thus, the Abioi are the most just of men because they are freed from the burden of property and toil.

47 See Strabo 7.3.2–10, who treats these groups as Scythians, as can be gathered by their simplicity and directness. See the classification of Lovejoy and Boas 1935, 7–11; see also 287–90, 325–7. There was also a tradition of negative characteristics of the northern peoples in the classical literature: Apollodorus attributed to them cannibalism and cruelty (*ap*. Strabo, 7.3.6), and Ephorus seems to have mentioned cannibal nomads, although he wanted to distinguish them from the 'ideal' Scythians (Strabo, 7.3.9). See further Bosack-Schroder, this volume.

48 See also Strabo 6.1.13, 6.3.4, 17.1.11 on corruption by advanced societies.

49 See also Caesar *B Gall*. 1.1, 6.24 and compare Tac. *Agr*. 21. See Griffin 2008.

50 This is a process opposite the imperialist importation of the periphery into the centre in the form of pharmaceuticals. See Totelin, this volume.

51 Compare the modern metaphor of "the sick man of Europe" applied to the Ottoman eastern empire and ascribed to Tsar Nicholas I of Russia. See Temperley 1936, 272.

52 See *Leg*. 3.696a. This passage comes after a discussion (3.684c) comparing the work of lawgivers to physicians' treatment of bodies. See also Ath. 12.513a on the Persians' *truphē*.

53 Also *Cyr*. 8.8.17.

54 See Briant 2001, 209 n. 16.

55 See Ath. 4.144c (Theophrastus), 144f (Theopompus), 145b–146a (Heracleides), 146c–d (Ctesias and Deinon).

56 See Arr. *Anab*. 2.7.
57 See Briant 2002, 266–7.
58 See Ath. 12.545a–546c; Justin 1.7.11–3. See Briant 2001, 205–6.
59 See Kennedy, this volume.
60 See Briant 2002, 615.
61 Probably influenced by this description, another portrayal (by Onesicritus?) of 'Cyrus' existed in which he was said to die in despair at the age of one hundred years (Luc. *Macr*. 14).
62 See Briant 2002, 264–6. See Llewellyn-Jones and Robson 2010, 15.
63 For the Egyptian physicians, see Hdt. 3.129. Pharaoh Amasis sent Egyptian doctors to Cyrus (Hdt. 3.1). See also 2.84. See the position of Udjahorresnet under Cambyses and Darius as chief physician at Sais and Samtutefnakht under Artaxerxes III or IV or Darius III. See Briant 2002, 80, 473, 860 and Nunn 1996.
64 On Democedes see Griffiths 1987. See also Ath. 12.522a–d.
65 See Almagor 2012. The emendation of the text to "seven years" as proposed by Müller 1844, 2 and followed by Drews 1973, 103 and Bigwood 1978, 19 should be accepted.
66 All explanations for Ctesias' captivity are speculative: see especially Brown 1978, 7–10, to the effect that Ctesias was captured during Pissouthnes' revolt (414 BCE). Stronk 2004–05, 102–4, followed by Llewellyn-Jones and Robson 2010, 14, suggest that it occurred during the revolt of Amorges (begun c. 413 BCE). One might presume that given the absence of any other information concerning Ctesias as prisoner (this does not appear even in Photius' summary and presumably such a dramatic event would have been recounted there), and given Diodoros' interest in prisoners of war elsewhere, this picture was perhaps the outcome of the latter's own interpretation.
67 *Pace* Lenfant 2004, XXXV n. 117, there appears to be some error in the transmission of the name of the physician involved, as Polycritos of Mende was a historian (*FGrH* 559) whose lost works concerned Sicily.
68 In another occasion, we are told (Diod. Sic. 17.5.3) of a physician's involvement in Bagoas' plot by administering poison to King Artaxerxes III.
69 See Cato the Elder in Plut. *Cat. Mai.* 23.3–4, Plin. *HN* 29.7.14 and Gruen 1992, 54–5, 75–80. Cato recommended his own treatment and regimen for his family (Plut. *Cat. Mai.* 23.8). See also Juvenal 3.60–72 and Swain 1996, 319–22. An expulsion of Greek physicians from Rome is mentioned by Plin. *HN* 29.8.16. Interestingly, Cato is said to mention the legend that Hippocrates refused to treat the Great King Artaxerxes, the enemy of the Greeks, following an alleged oath common to all physicians (Plut. *Cat*. *Mai*. 23.3). See also the fifth pseudo-Hippocratic letter. See Pinault 1992, 79–93, especially 89–90.
70 See Ctesias F 14.41. See Briant 2002, 266–7.
71 The Magi conveyed this knowledge to Democritus, claims Pliny *HN* 30.8, and from this source he quotes in books 34 and 37. See Bidez and Cumont 1938, 1.76–77, 204–5.
72 They also included meals and presents such as ten thousand Darics, couches with bedding. See also Plut. *Pel*. 30.9–12; Suda, s.v. 'Timagoras'.
73 See *De Morbis Popularibus* 2.5.14, 2.6.13, 7.1.3; *De Affectionibus Interioribus* 1, 13, 28, 46, 51. I am grateful to Rebecca and Molly for their kind invitation to participate in this volume.

Bibliography

Almagor, Eran. 2005. "Who Is a Barbarian? The Barbarians in the Ethnological and Cultural Taxonomies of Strabo." In *Strabo's Cultural Geography*, edited by Daniela Dueck, Hugh Lindsay and Sarah Pothecary, 42–55. Cambridge: Cambridge University Press.

——. 2012. "Ctesias and the Importance of his Writings Revisited." *Electrum* 19: 9–40.

——. 2013. "'But This Belongs to another Discussion': Exploring the Ethnographic Digressions in Plutarch." In *Ancient Ethnography: New Approaches*, edited by Eran Almagor and Joseph Skinner, 153–78. London: Bloomsbury.

Anderson, Benedict R. 1986. *Imagined Communities. Reflections on the Origin and Spread of Nationalism*. London: Verso.

Bidez, Joseph and Cumont, Franz. 1938. *Les Mages Hellénisés: Zoroastre, Ostanès et Hystaspe, d'Après la Tradition Grecque*, 2 vols, Paris: Les Belles Lettres.

Bigwood, Joan. 1978. "Ctesias as Historian of the Persian Wars." *Phoenix* 32: 19–41.

Briant, Pierre. 2002. *From Cyrus to Alexander: A History of the Persian Empire*. Winona Lake, IN: Eisenbrauns.
——. 2001. "History and Ideology: The Greeks and 'Persian Decadence.'" In *Greeks and Barbarians*, edited by Tom Harrison, 193–210. Edinburgh: Edinburgh University Press.
Brown, Truesdell S. 1978. "Suggestions for a Vita of Ctesias of Cnidus." *Historia* 27: 1–19.
Browne, Stanley G. 1970. "How Old Is Leprosy?" *British Medical Journal* 3: 640–41.
Colautti, Federico M. 2002. *Passover in Flavius Josephus*. Leiden: Brill.
DeVos, George. 1975. "Ethnic Pluralism: Conflict and Accommodation." In *Ethnic identity*, edited by George A. De Vos and Lola Romannucci-Ross, 5–41. Chicago, IL: University of Chicago Press.
Detienne, Marcel. 1989. *Dionysos at Large*. Cambridge, MA: Harvard University Press.
Dillery, John. 1999. "The First Egyptian Narrative History: Manetho and Greek Historiography." *Zeitschrift für Papyrologie und Epigraphik* 127: 93–116.
Drews, Robert. 1973. *The Greek Accounts of Eastern History.* Cambridge, MA: Harvard University Press.
Epstein, A.L. 1978. *Ethos and Identity: Three Studies in Ethnicity*. London: Tavistock and Chicago, IL: Aldine Publishing.
Feldman, Louis H. 1998. *Josephus' Rewritten. Bible*. Leiden: Brill.
——. 2000. *Flavius Josephus: Translation and Commentary*. Vol. 3: *Judean Antiquities 1–4*. Leiden: Brill.
Ferrari, Giovanni R.F. 2003. *City and Soul in Plato's Republic*. Chicago: University of ChicagoPress.
Ferris, Iain. 2000. *Enemies of Rome: Barbarians through Roman Eyes*. Stroud: Sutton.
Fischer, Curt Theodor and Wecker, Otti. 1924. "Kynokephaloi." *Paulys Realencyclopädie der Classischen Altertumswissenschaft* 12: 24–6.
Gager. John G. 1972. *Moses in Greco-Roman Paganism*. Nashville, TN: Abingdon Press.
Gardiner, Alan. H. 1918. "The Supposed Egyptian Equivalent of the Name of Goshen." *Journal of Egyptian Archaeology* 5: 218–23.
——. 1924. "The Geography of the Exodus: An Answer to Professor Naville and Others." *Journal of Egyptian Archaeology* 10: 87–96.
Gellner, Ernest. 1972. *Thought and Change*. London: Weidenfeld and Nicolson.
Girard, Rene. 1977. "Dionysus and the Violent Genesis of the Sacred." *Boundary* 2.5: 487–506.
Glazer, Nathan and Moynihan, Daniel P. eds. 1963. *Beyond The Melting Pot*. Cambridge, MA: Harvard University Press.
Griffin, Miriam. 2008. "Iure Plectimur: The Roman Critique of Roman Imperialism." In *East and West: Papers in Ancient History Presented to Glen W. Bowersock*, edited by T. Corey Brennan and Harriet I. Flower, 85–111. Cambridge, MA: Harvard University Press.
Griffiths, Alan. 1987. "Democedes of Croton: A Greek Doctor at Darius' Court." *Achaemenid History* 2: 35–71.
Grmk, Mikro D. 1989. *Diseases in the Ancient Greek World*. Baltimore, MD: Johns Hopkins University Press.
Gruen, Erich S. 1992. *Culture and National Identity in Republican Rome*. Ithaca, NY: Cornell University Press.
Hall, Edith. 1989. *Inventing the Barbarian*. Oxford: Oxford University Press.
Hartog, Francois. 1988. *The Mirror of Herodotus: The Representation of the Other in the Writing of History.* Berkeley: University of California Press.
Heurgon, Jacques. 1961. *La vie quotidienne chez les Étrusques.* Paris: Hachette.
Hort, Greta. 1957. "The Plagues of Egypt." *Zeitschrift fur die Alttestamentliche Wissenschaft* 69: 84–103.
Houtman, Cornelis. 1996. *Historical Commentary on the Old Testament: Exodus*, vol. 2. Kampen: Kok Publishing House.
Hulse, E.V. 1975. "The Nature of Biblical Leprosy and the Use of Alternative Medical Terms in Modern Translations of the Bible." *Palestine Exploration Quarterly* 107: 87–105.
Isajiw, Wsevolod W. 1974. "Definitions of Ethnicity." *Ethnicity* 1: 111–24.
Jacobson, H. 1996. *A Commentary on Pseudo-Philo's Liber Antiquitatum Biblicarum*. Leiden: Brill.
Jouanna, Jacques. 1990. "La maladie comme agression dans la Collection hippocratique et la tragédie grecque." In *La Maladie et les Maladies dans la Collection Hippocratique*, edited by Paul Potter, Gilles Maloney and Jacques Desautels, 39–60. Quebec: Editions du Sphinx.
——. 2012. "Water, Health and Disease in the Hippocratic Treatise *Airs, Waters, Places*." In *Greek Medicine from Hippocrates to Galen*, edited by Jacques Jouanna, 155–72. Leiden: Brill.
Karttunen, Klaus. 1989. *India in Early Greek Literature.* Helsinki: Finnish Oriental Society.

Kerényi, Karl. 1976. *Dionysos: Archetypal Image of Indestructible Life.* Princeton, NJ: Princeton University Press.
Kosmin, Paul J. 2014. *The Land of the Elephant Kings*. Cambridge, MA: Harvard University Press.
Kraus, Rolf. 2006. "Manethos Ägyptische Geschichte: Eine Ptolemäische oder Römische Kompilation?" In *Timelines in Honour of Manfred Bietak*, edited by Ernst Czerny *et al.,* 227–34. Leuven: Peeters.
Laqueur, Richard. 1928. "Manethon." *Paulys Realencyclopädie der Classischen Altertumswissenschaft* 27: 1060–101.
Lassen, Christian. 1874. *Indische Altertumskunde*. Leipzig: L.A. Kitter.
Lenfant, Dominique. 2004. *Ctésias de Cnide. La Perse, L'Inde, Autres Fragments*. Paris: Les Belles Lettres.
Lindegger, Peter. 1982. *Griechische und Römische Quellen zum Peripheren Tibet*, vol. 2. Rikon/Zurich: Tibet Institut.
Llewellyn-Jones, Lloyd and Robson, James. 2010. *Ctesias' History of Persia: Tales of the Orient.* London: Routledge.
Lovejoy, Arthur O. and Boas, George. 1935. *Primitivism and Related Ideas in Antiquity*. Baltimore, MD: Johns Hopkins University Press.
Mendels, Doron. 1990. "The Polemical Character of Manetho's *Aegyptiaca*." In *Purposes of History: Studies in Greek Historiography from the 4th to the 2nd Centuries B.C.*, edited by Herman Verdin, Guido Schepens and Eugénie de Keyser, 91–110. Leuven: Orientaliste.
Mitchell, Peta. 2012. *Contagious Metaphor*. London: Bloomsbury.
Müller, Karl Friedrich Wilhelm. 1844. *Ctesiae Cnidii et Chronographorum, Castoris, Eratosthenis, etc. Fragmenta Dissertatione et Notis Illustrata*. Paris: Didot.
Naville, Edouard. 1924. "The Geography of the Exodus." *Journal of Egyptian Archaeology* 10: 18–39.
Neu, J. 1971. "Plato's Analogy of State and Individual: The Republic and the Organic Theory of the State." *Philosophy* 46: 238–54.
Nunn, John F. 1996. *Ancient Egyptian Medicine*. London: British Museum Press.
Pearson, Lionel. 1939. *Early Ionian Historians*. Oxford: Clarendon Press.
Peter, Hans. 1914. *Historicorum Romanorum Fragmenta*, vol. I. Stuttgart: Steiner.
Pinault, Jody R. 1992. *Hippocratic Lives and Legends*. Leiden: Brill.
Rankin, David. 1987. *Celts and the Classical World*. London and Sydney: Croom Helm.
Redford, Donald B. 1986. *Pharaonic King-Lists, Annals and Day-Books: A Contribution to the Study of the Egyptian Sense of History*. Mississauga, Ontario: Benben.
Romm, James. 2010. "Continents, Climates, and Cultures: Greek Theories of Global Structure." In *Geography and Ethnography: Perceptions of the World in Pre- Modern Societies*, edited by Kurt Raaflaub and Richard Talbert, 215–35. Malden, MA: Wiley-Blackwell.
Ryan, F.X. 2000. "Die Lebensdaten Manethos." *Göttinger Miszellen* 176: 85–8.
Sawyer, John F. 1976. "A Note on the Etymology of Sara'at." *Vetus Testamentum* 26: 241–5.
Schäfer, P. 1997. "Die M.-Fragmente bei Josephus und die Anfänge des antiken Antisemitismus." In *Aporemata: Kritische Studien zur Philologiegeschichte*, Band 1, edited by Glenn W. Most, 186–206. Göttingen: Vandenhoeck und Ruprecht.
Schmidt, Thomas. S. 1999. *Plutarque et les Barbares: La Rhétorique d'une Image*. Louvain: Peeters.
Segal, Charles. 1982. *Dionysiac Poetics and Euripides Bacchae*. Princeton, NJ: Princeton University Press.
Segal, Judah B. 1963. *The Hebrew Passover from the Earliest Times to A.D. 70*. Oxford: Oxford University Press.
Shafer, Robert. 1964. "Unmasking Ktesias' Dog-headed People." *Historia* 13: 499–503.
Smith, Anthony D. 1986. *The Ethnic Origins of Nations*. Oxford: Wiley-Blackwell.
Stronk, Jan. 2004–05. "Ctesias of Cnidus: From Physician to Author." *Talanta* 36–7: 101–22.
Swain, Simon. 1996. *Hellenism and Empire.* Oxford: Oxford University Press.
Temperley, Harold. 1936. *England and the Near East*. London: Longmans, Greens and Co.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science, and the Art of Persuasion*. Cambridge: Cambridge University Press.
Thompson, Lloyd A. 1979. "Strabo on Civilization." *Platon* 31: 213–29.
Weber, Max. 1959 [1922]. *Wirtschaft und Gesselschaft*, vol. 1. Tuebungen: Mohr-Siebeck.
White, David G. 1991. *Myths of the Dog-man*. Chicago, IL: University of Chicago Press.
Williams, Jonathan H.C. 2001. *Beyond the Rubicon: Romans and Gauls in Republican Italy*. Oxford: Oxford University Press.

Woolf, Greg. 1998. *Becoming Roman: The Origins of Provincial Civilization in Gaul*. Cambridge: Cambridge University Press.
Yelvington, Kevin A. 1991. "Ethnicity as Practice?" *Comparative Studies in Society and History* 37: 158–68.
Zenner, Walter P. 1985. "Jewishness in America: Ascription and Choice." *Ethnic and Racial Studies* 8: 117–33.

6
THE FIXED AND THE FLUENT
Geographical determinism, ethnicity and religion c. 1100–1300 CE

Claire Weeda

From about 1100 CE, medical scientific theories on the humours and the impact of environment on human physiognomy again began to influence how people viewed the ethnic, religious and social Other. These theories offered a blueprint for categorizing and explaining the perceived physical and psychological make-up of individuals and members of ethnic, religious and social groups. As such, these theories partially embedded cultural, social and religious differences in a comprehensible, explanatory scientific framework, which could subsequently inform opinions and shape actions regarding these Others.[1] Environmental factors that purportedly impacted the body included geographical location and its topography, such as mountainous terrain or lowlands, and climatic features. Doctors advised patients to take heed of these influences and endeavoured to manipulate the complexional make-up (phlegmatic, sanguine, choleric, or melancholic) of individuals and groups by means of so-called 'non-naturals', such as diet, sleep and the environmental conditions in which people lived.[2]

In late medieval Europe, locality (elevation, proximity to water, soil quality), among other factors, could also be taken into careful consideration in urban building prescriptions. It was believed that locality and climate could, for instance, bring about physical deformities such as "tumours, squints, and limps", as Leon Battista Alberti (1404–1472) states in *De re aedificatoria* I.15. Similarly, taking dietary and hygienic measures was considered to encourage better health.[3] Environmental-geographical conditions, climate, quality of air and water, and food were all thus considered factors which determined health and disease, as smells, sights, sounds and nutrition permeated the body through its orifices (nose, mouth, skin pores) and regulated a person's humoural (im)balance. However, although it was considered possible to tinker with humoural complexions, these were to an extent considered an hereditary physiological state of being. From c. 1200 CE, complexional types were increasingly viewed as dominant in certain groups.[4] In relation to religion and ethnicity, this raises the question of to what extent mental and physical group characteristics were deemed mutable or fixed, a product of nature, culture, or, thirdly, divine appointment. In this third aspect of religion, humoural theory took a new departure from antiquity, as scientific discussions were infused with religious questions stretching from the material aspects of the resurrected body, to whether man's complexion was corrupted after the Fall.[5]

In 2009, the ground-breaking anthology *The Origins of Racism in the West* for the first time addressed the transmission of Greek and Arabic medical texts on humoural and climate

theory and the embodiment of ethnic differences in medieval western Europe in a series of related articles.[6] Consequently, I will only briefly touch on the transmission of this body of knowledge, and will instead focus on how the intermeshing of scientific and religious beliefs shaped Christian attitudes towards ethnic and religious categories and their presumed potential for change.[7] The main questions addressed are to what extent environment was considered to influence group characteristics' ability to change, and how religion left its mark on scientific discussions on bodily characteristics. As I shall discuss, Christianity itself adopted a genealogical discourse, paving the way for discussions on whether an individual's or group's 'innate' characteristics allowed for religious conversion.

The theory that climate influenced character survived the early Middle Ages only by the skin of its teeth, and did not subsequently dominate perceptions of the Other in the sources which have come down to us, although it did linger on in the writings of, for example, Tertullian, Jerome and especially seventh-century Isidore of Seville (*Etymologiae* 9.2.105, who was influenced by fourth-century grammarian Servius's, *Commentaries on the Poems of Virgil* 6.724). This contribution, therefore, commences around the close of the eleventh century, when a stream of translations on natural science, astrology and geography from Arabic into Latin flowed into the West, including many textbooks on Arab-Greek medicine, first at Monte Cassino and Salerno, and from the second half of the twelfth century in Spain.[8] At the end of the twelfth century, for instance, a new translation appeared of Hippocrates' *Air, Waters, Places* from the Arabic. Especially relevant for humoural theory were Constantine the African's (c. 1020–1087) *Liber pantegni* ('Encompassing all arts'), an adaption of the *Kitab al-Malaki* ('The Royal Book of All Medicine') by tenth-century Ali ibn al-Abbas al-Majusi (or Haly Abbas), and Avicenna's eleventh-century *Canon*. Furthermore, in the twelfth century, Galen's *On Complexions* was translated into Latin by Burgundio of Pisa.[9] In its wake, clerics and monks in Western Europe once again actively turned their thoughts to the relationship between environment and group characteristics.

What did climate and humoural theory entail? Summarily: according to ancient Hippocratic theory, a region's climate, winds, precipitation and terrain were all said to shape man's physical and mental disposition.[10] In broad strokes, this theory evolved into the belief that men living in the northern parts were courageous and free-spirited, yet rash due to an abundance of blood; in the south, on the other hand, people were generally weak and cowardly, but also intelligent or cunning. In the temperate middle lived the ideal sanguine man, who was courageous but also endowed with reason.[11] This theory was linked to the belief that, physiologically, man was made up of the four elements, which were subject to four qualities: air—hot and moist; fire—hot and dry; water—cold and moist; earth—cold and dry. These four combinations, depending on their mixing and separation, determined matter in the physical world. Each of the four combinations had its counterpart in the human body, matching the four bodily humours: the sanguine, choleric, phlegmatic and melancholic. These determined a person's complexion and thus his mental state.[12] Disease was thought to set in when these qualities, such as hot and cold or dry and moist, were imbalanced.[13] These qualities were of overriding importance according to Avicenna's relativist concept of a balanced complexion, which was unique to each individual.

However, in the early medieval works like those of Isidore and Bede (672–735), medical theory began to spawn humoural 'types'.[14] From the twelfth century onward, medical texts (but also manuals for composing poetry) might typify individuals according to more or less fixed humoural (stereo)types.[15] These 'radical' complexional types were described and discussed in numerous medical treatises on complexions or health regimens, such as the verse *Salernitan Regimen of Health*.[16] The implications of a person's complexional make-up could be far-reaching. As Roger Bacon (c. 1214–c. 1294) stated, radical complexions determined

men's dispositions in regards to morals, learning and languages, crafts and workmanship (*Opus Maius* XXX).[17]

With the translation of Arabic-Greek medical treatises, differences between ethnic groups in Western Europe were thus no longer viewed as especially cultural, social, or linguistic phenomena, but were also "humourally embodied".[18] This increasingly "biological mode of thinking"[19] about cultural, social, and religious differences was part of a broader development wherein natural philosophy and medicine pervaded all kinds of discussions about the nature of mankind, environment, and society. Medical-humoural theories indeed left their stamp on (and were influenced by) urban policies and practices, from etiological discussions on miasma theory, clean air, and the plague, to ideas about bathing, waste disposal and the benevolent effects of green spaces.[20] Its significance also stretched to a holistic conception of society as a body politic (whether urban or national), made up of limbs and organs that ideally functioned in conjunction to ensure a balanced, healthy community.[21] One of the consequences of viewing society as an organism was that outside influences pervading society could be perceived as a threat to its equilibrium; 'foreign' influences, such as the religious or social Other and his/her cultural and religious traditions and beliefs, could constitute a danger that was presented in physiological terms. As such, the question under discussion here—whether the physical and mental characteristics of members of (ethnic, religious, social) groups were in flux and subject to change—is highly relevant, as it offered a theoretical opportunity (or impossibility) for the Other to adapt to society's culturally scripted physical and social norms. On the other hand, the perception that groups had fixed characteristics as 'universal types' might legitimize the drawing of distinct boundaries between ethnic groups in order to rule out any threat of liminality and bring order to chaos.

Audience and reception

Before turning to the fluid or fixed nature of characteristics, I provide a brief overview about the spread of knowledge of climate-humoural theory from c. 1100 CE onwards. Peter Biller has pinpointed two academic circles where the body of knowledge of climate theory was diffused: among clerics educated at the universities, and mendicant friars, who preached in towns and on missionary excursions.[22] Many of the texts on the humours and climate theory featured on the reading lists of arts faculties in Paris, Salerno, or Bologna. In the twelfth century, some of the most elaborate discussions on climate, geography and character appear in texts of clerics who studied at Paris, such as Gerald of Wales' (c.1146–c.1223) *Topography of Ireland* and *On the Instruction of Princes*.

Scientific texts also appeared in the curriculum of students in Germany attending the *studia generalia*, where Dominican and Franciscan mendicant friars taught. For instance, in the first half of the thirteenth century, the Dominican friar Albert Magnus, who taught in Cologne, produced *On the Nature of Places*, an extensive treatise on the influence of environment. In the same period, Franciscan friar Bartholomaeus Anglicus compiled an encyclopaedic work, *On the Properties of Things*, of which books 4 and 15 discuss the humours and geographical regions respectively, and which was lectured on in Saxony and produced a flurry of copies. Besides numerous treatises on the complexions and regimens of health, questions on the humours were also addressed in academic *quodlibet*-sessions (formal disputations on theological or philosophical positions) from the thirteenth century onwards. However, even before the expansion of knowledge of climate theory within the *artes-liberales* programme, we can already trace its influence in early twelfth-century texts written by Benedictine monks Guibert of Nogent (*Deeds of God through the Franks*) and William of Malmesbury (*Deeds of the English Kings*). Both included climate-related discussions on, for example, the lack of bravery amongst the

Saracens and other 'heretics' during the First Crusade. Besides direct textual transmission, Biller also emphasizes the spread of these ideas by mendicant friars (there were more than 40,000 friars by the early fourteenth century) in their sermons, preaching before laymen in medieval towns. This raises the question as to what extent these ideas were circulating beyond academic circles, and were alive in the minds of people without an extensive education. Although it is extremely difficult to estimate the breadth of this audience—as we have to rely mostly on the writings of the educated—at the very least, manuscript images and church sculptures of Saracens or Jews do offer us a glimpse of prejudiced representations of the religious Other as dark, monstrous, or large-nosed.[23] Whether these were grounded on scientific theory is, however, contestable. An extensive survey of the presence of ethnic images in sermons, which might offer valuable additional information, has yet to be executed.

Climate and humoural theory also feature in vernacular texts. In the middle of the twelfth century, Benoît de Saint Maure, a twelfth-century French poet, compiled the *Chronicles* about the history of Norman dukes in the old-French vernacular.[24] Taking an ethnocentric position, Benoît directly applies climate theory in his verses, stating that Europe's environment, at the centre of the world, was pleasant and temperate, "right and handsome and delightful and bounteous and abundant in all that a man needs". The men in Europe similarly correspond to the ideal type, "of handsome form and wise manners, discreet, reasonable, and well dressed. They are neither too tall nor too short. There they have courteous manners, and arts, laws and justice."[25] Conversely, all of this is absent in the South; the men there do not know the difference between right and wrong, know no laws, religion, or reason, and are, in fact, worse than dogs: black, horned and hairy (*Chronique des ducs de Normandie* 1.11)[26]. Benoît mentions all these elements in his Old French chronicle as if they are matters of fact. In this instance, we can also see that climate theory was infused with religious concerns, similar to the texts of Guibert de Nogent (c. 1055–1124), William of Malmesbury (c.1095-c.1143) and Gerald of Wales.

However, as Irina Metzler remarked, while scientific theory shaped the mental world and preconceived ideas in late medieval travel writing, and thus the presentation of the world they experienced, scientific theory was frequently adapted based upon preconceived notions of the degree of civilization of a people.[27] Scientific theory thus adapted to and accommodated cultural value judgements on the geographical, cultural and religious Other, and stereotypes of the Other were not in all cases derogatory. The varieties in perceptions of the Other in time and space and the fluidity of the impressions in individuals' minds suggest that we must be very careful to avoid overemphasizing structures of thought, assuming that medical-humoural complexional types were always at the forefront of people's minds when encountering the Other. Nor can we assume that their behaviour and actions towards the other were at all times dominated by these theories.[28]

Nature and nurture

Nonetheless, from the twelfth century, scientific and religious thinking crossed paths, creating an intricate mesh of beliefs about the role of nature, nurture, and free will, intertwining and informed by cultural, social and religious factors and values. This leads to the question of whether physical and mental characteristics ensuing from a specific humoural balance were considered innate and fixed or subject to change. Here, I concentrate on members of ethnic groups and the role of geographical determinism, although other categories were considered equally subject to such influences.

According to medical-humoural theory, a person's natural complexion was contingent on external factors. It postulated that man possessed an innate complexion (*complexio innata* or

radicalis), passed down through parental transmission (semen and blood). Yet man's natural complexion (*complexio naturalis*) was deemed changeable as a result of 'non-natural' influences such as climate and the seasons, planetary conjunctions, nutrition, but also a person's profession.[29] In the fourteenth century, in a commentary on the *Physiognomia* mistakenly attributed to Aristotle, philosopher Jean Buridan states clearly: "Also know that a complexion is two-fold, for it can be judged that somebody has a certain innate complexion. The other complexion is acquired or fluent, and is not innate but acquired as a result of a regimen contrary to a person's complexion."[30]

How did a person 'inherit' his innate complexion? According to medieval embryology, the innate complexion was acquired through parental transmission; the complexion of the father's semen was usually considered dominant, as it mixed with the mother's blood.[31] The male semen, carrying the *virtus informativa*, was responsible for the formation of the embryo and its parts, which resembled the human species but bore accidental particularities such as sex, complexion and skin colour. Originating in the heart and itself drawn from blood, the male semen thus constituted "the defining constituent of the human being" (as a result, male 'blood ties' were recognized over female in law).[32] The complexion and quality of this *virtus informativa* at the moment of generation went on to determine the development of the embryo.[33] However, already at the moment of generation natural and "non-natural" conditions might influence the (active) sperm. The mother's (passive) blood could hamper the reception of the paternal form;[34] in that case, the child was more likely to resemble the mother (or possibly the grandparents).[35] The woman's blood (*sanguis generationis*), although secondary, thus certainly could influence the formation of the embryo. The parents' and offspring's complexion was consequently not necessarily identical; for example, a sanguine father could generate a phlegmatic child, or vice versa.[36]

It makes sense that a child was more inclined to inherit the same complexion as its parents if theirs was identical. The opening sentences of a widely circulated treatise printed in Leipzig in 1500, the *Tractatus de complexionibus Magistri Johannis de Nova domo*, states:

> It is manifest from particular causes that a phlegmatic man comes from a phlegmatic, and a choleric from a choleric, and especially if both male and female are of the same complexion, they beget children of the same complexion [. . .] Complexions follow from similar complexions, so that sanguine generates sanguine, and noble noble, and ignoble ignoble.[37]

That discussions of the hereditary nature of complexions were tied up with the heredity of nobility and horse breeding can be discerned from an earlier thirteenth-century text, *Questions on Animals*, in which Albertus Magnus poses the Aristotelian question whether philosophers will beget intelligent children. Albertus states that "those of noble birth will beget noble and better children, as is the case with horses," for "the sperm contains both the bodily and the mental virtue [. . .] thus children are akin to their parents in their bodily disposition, to that extent that they are by the same reasoning akin in mental disposition, such as in wisdom and knowledge."[38] Indeed, the lexicography of 'race'—again first employed in the fifteenth century in a hunting poem about dogs—originates in the word *haras*, an old Norman word for stud farm.[39] As Charles de Miramon has pointed out, the concept of 'race' evolved from a discourse on noble 'hereditary blood' in fourteenth-century hunting literature about hounds, birds and horses.[40] By the fifteenth century, the Moorish and Jewish 'races' were featured in a discourse on horse breeding and race in a marriage of the domains of "political disability and reproductive fitness", as David Nirenberg writes in his discussion of fifteenth-century Spanish *anti-converso* ideology.[41]

In addition, geographical-environmental determinism nurtured the spawning of types, as group members living under the same skies were subjected to the same 'non-natural' conditions of climate that purportedly impacted the body and mind. As such, humoural-climatic theory offered a framework for essentializing and universalizing the characteristics of individuals in a specific region. It is difficult to pinpoint to what extent these theories flowed from the perception of some similarities in appearance and culturally scripted behaviour of group members in specific regions, or at the same time manipulated that very perception. The fact that people living in the same region were subject to the same environmental conditions invited John of Newhouse to infer that members of ethnic groups, by *inheriting* the complexion of their forebears, shared the same innate character, as long as the conditions in which they lived were not markedly variable. Thus he concluded that the Saxons, Frisians, Poles and Thuringians all shared the same character because they were nursed in the same place and under the same constellation. (A scribe commenting on this text saw fit to clarify the rise in criminality in certain regions, stating that, "thus there are more thieves in one country than another").[42]

At least from the fourteenth century, notions that group members could inherit their forebears' complexion, and that regional-climatic influences left their imprint, thus began to lay the foundation for the idea that entire ethnic groups might share the same characteristic features, both mental and physical, although these remained subject to all kinds of variables environmental, cultural, and religious. This now brings us first to the question of how complexional change might occur, for instance, in the case of migration. Secondly, I will discuss the religious dimensions of changes in complexion.

Complexional change

In the late Middle Ages, a paradigmatic shift occurred from the belief that ethnic characteristics were cultural (and passed down through genealogical lines) to the idea that they were hereditary. Offspring might enjoy the same complexion and disposition as their parents, especially when the latter took the proper dietary measures.[43] Although one's innate complexion was considered relatively stable, a person's complexion was, however, subject to many non-natural influences throughout life. Tampering with one's humoural balance could be effectuated by means of nourishment or, for example, by moving to a different climate.[44] Children placed under the care of a wet nurse who had a different complexion, or who received nutrition unbefitting their humoural make-up, could thus undergo complexional change.[45] The treatise attributed to John of Newhouse states that a melancholy child who is breastfed by a wet nurse:

> . . . who has a beautiful, good complexion [. . .] will transform and change. And this is true if it is continued over a long period of time. And because of this, sons do not always follow the physiognomy of their father or mother, because, naturally changed, they are fed with somebody else's blood.[46]

Besides a nurse's milk, there was the factor of migration. People did travel and relocate in medieval times, although long-term sojourns were the prerogative mostly of intellectuals, missionaries and international traders, hardly large population groups. Although perhaps this is a somewhat hypothetical discussion—as the large bulk of people stayed at home, in their villages or towns—we can ask what complexional change purportedly occurred among those who migrated for longer periods of time.

In theory, upon migration, people with an innate sanguine complexion could slowly turn more choleric, and the choleric more melancholic. Yet the transformation was deemed cumbersome, especially if the complexions were less compatible (i.e., the transition from phlegmatic to choleric is arduous).[47] Medical scientists of the period grappled with the extent to which the *innate* complexion might change in form or substance.[48] A few examples of this discussion demonstrate its longevity. In the fourth century CE, in his commentary on the *Aeneid*, Servius reiterated Ptolemy's belief that upon moving from one region to another, a person's constitution might change only partially, as he had from the onset been endowed with a specific bodily predisposition (*In Vergilii carmina commentarii* 6.724).[49] In the early eleventh century, Avicenna (Ibn Sina) stated that in light of the fact that each individual had his own balanced complexion, depending on eight variables, an Indian who moved northwards would become imbalanced as the climate would not be conducive to his individual complexion; the same applied to a Slav travelling southwards (*Liber canonis* I 1 3,1).[50] In the thirteenth century, Albertus Magnus likewise states that "men who move to a different climate on account of the unnaturalness of the place [as regards them] grow weaker and are destroyed, and when they return to their native places, they recover health."[51] It was for the same reason that lions could only survive in the more southerly regions. Complexional change could come, but at a price.

Some medieval Latin medical treatises, however, evinced the belief that complexional change caused by migration might have some benefits.[52] Conveniently for Albertus Magnus, born in Lauingen, Bavaria, but educated in Padua, German students travelling southwards experienced an expedient mental transformation. Originating in the cold North, "their humour is thick and bodily spirit does not respond to the motion and receptivity of mental activity," and as a result "they were dull-witted and stupid."[53] But when they are moved to study, they persevered for longer time spans and the mental exercise had positive effects. Thus, for the Germans, although intellectually dullards, there was still hope, as a gentler climate generated a more astute intellectual mind. The Danes and the Slavs in the far North, on the other hand, care little for study. People living in even colder climes, lacking intellectual curiosity, refrained from moving southwards and thus remained stuck in their backwardness. Cultural inertia was thus interpreted as the outcome of environmental factors.[54]

Along the same line of reasoning, the idea that an entire ethnic group's character could change (partially) as a result of migration can be found in the twelfth-century writings of churchmen such as Gerald of Wales and Otto of Freising. The Welsh, who, according to Gerald of Wales, originally descended from Aeneas' progeny Brutus, were said not to be able to forget their 'Trojan blood.' Their boldness of speech, which they held in common with the Romans and Franks (and not with the English or Germans), and the Britons' swarthy colour, naturally warm character and hot temperament all derived, according to Gerald, from natural causes, in particular, stemming from their original descent from the hot and arid Trojan plain (*Descriptio Kambriae* 1.15, 2.15). On the other hand, according to Cistercian bishop Otto of Freising, the Lombards had over time transformed from barbarians into men of elegant manners. This felicitous change was "perhaps from the fact that when united in marriage with the natives they begat sons who inherited something of the Roman gentleness and keenness from their mother's blood," Otto writes. Also, they could "from the very quality of the country and climate, retain the refinement of the Latin speech and their elegance of manners."[55]

In the early thirteenth century, in *On the Properties of Things*, Bartholomaeus Anglicus similarly explicitly explains the character of the people of Poitou in terms of ethnogenesis caused by an intermingling of the character traits of the Picts and the Gauls in the wake the first's migration. The inhabitants, says Bartolomaeus:

> . . . whose language and manners are intermixed with the regions of Gallia to the extent that although descending from the early Picts and thus being naturally strong and elegantly built, nonetheless have contracted from the Gauls, with whom they are intermixed, their fierce minds and sharper wits than neighbouring peoples.[56]

Unsurprisingly so, Bartholomaeus writes, because the climatic diversity of the heavens makes that people's skin colour, physical appearance and manners differ. However, change did not entail a full transformation. Although the character of the Picts had merged with that of the Gauls because of both hereditary and climatic influences, still the people of Poitou supposedly carried within them the seeds of a Pictish nature, just as, according to Gerald of Wales, the Britons, descendants of Trojan Brutus, still retained a boldness of speech as a result of their origins in Asia Minor.[57]

In the view of some medieval scholars, even skin colour could change as a result of migration, as skin colour was thought to be determined by heat or cold.[58] Black skin colour was considered to be unrelated to the melancholy black complexion caused by an excess of black bile, as the whole schema of humours was calibrated to white-skinned persons. A southerner with an excess of phlegm, would accordingly perhaps turn a lighter shade of black, but still remain dark-skinned.[59] In a passage on the Ethiopians (who are "exceedingly wrinkled from dryness, as a pepper seed, and very black on account of the heat [. . .] their bodies grow dark on account of the scorching of the body"), Albertus Magnus explains how skin colour can change after a length of time because of the heat or cold. For "sometimes black people of this kind are born in other climes, as in the fourth or fifth," and have migrated northwards. Nevertheless, although inheriting "their blackness from their ancestors who are complexioned in the first and second clime, even so a little at a time they are altered to whiteness when they are transferred to other climes."[60]

Summarizing, humoural and climate theory postulated that individuals and members of ethnic groups had innate yet malleable complexions, fixed yet changeable physical and mental character traits. If individuals enjoyed the same complexion, lived in the same region, and followed a balanced diet in compliance with their complexion, it was likely that their progeny would inherit the same complexion. This could apply especially to members of ethnic groups, as geographic determinism meant that group members were subject to the same environmental conditions. However, when group members migrated, their 'ethnic character' could naturally mutate; in this sense, ethnic character was not fixed. There is a lack of clarity on the theoretical time span required for complexional change. Although it was not wholly out of question that a member of an ethnic group could eventually change—as Albertus Magnus observed about the dull-witted Germans—how long would this metamorphosis take in the eyes of contemporaries? The answer was probably open to ethnocentric manipulation, depending on the desirability of emphasizing change (for example, in the case of those originating from the 'barbarian North,' or minority groups in Western society) or stability (relevant to those originating from regions considered as temperate).

However, even if individuals or entire ethnic groups were subject to upheaval, then it still remained open to dispute whether a person's nature would undergo essential change. The question about 'essential' change is significant especially where religious identity is concerned since religion played a role in biological thinking about 'innate'characteristics and mutability.

Geography and religious determinism

As stated above, a fundamental change in thinking about physiology occurred in medieval times under the influence of Christendom. For an additional factor entered into the debate:

the role of sin in bodily corruption and, conversely, the power of conversion and contrition in regaining a healthy constitution. Disease and sin were siblings, and the bodies of the religious and social Other—heretics, Jews, lepers, peasants—were considered by some to be morally and physically infirm. Similarly we can speak of the 'geographic Other', who, from the Eurocentric viewpoint, dwelled in the hotter regions in the East (Asia Minor) and South (Africa). Geographical determinism could run parallel to religious categories, as the Islamic Other inhabited the hotter southeastern Mediterranean. From the twelfth century, religious men such as Bartholomaeus Anglicus and Benoît de Saint Maure thus extol the *Christian* European as excelling in character and behaviour under the influence of the skies, in contrast with those inhabiting the treacherous East or South. In order to theoretically underpin this position, northern Europe is depicted as the most temperate region, a climatic shift northwards from ancient Greece and Italy.

The creation of a dichotomy between Asia and Europe was older than this period, as already in antiquity Hippocrates stated that Asia (all land south and east of the Black Sea and Don River) was more temperate due to its proximity to the sun.[61] In the twelfth century, intellectuals such as Gerald of Wales and William of Malmesbury were aware that, according to climate theory, those living in the East/South were naturally more intelligent due to the warm climate. However, in this period these regions were, problematically, mostly inhabited by Muslims, whose faith was generally considered heretical. As a result, this called for a re-evaluation of the East, informed by a religious discourse.

The incongruence between theory and reality was a problem that Ptolemy had already grappled with in antiquity in *his* representation of the purportedly intelligent inhabitants of the South, the Ethiopians—who in his view were actually savage (*Tetra.* 2.2).[62] Ptolemy's solution was to state that the wise southerners lived in the southern part of the temperate middle zone. In the same manner, intellectuals in northern and western Europe, too, were unwilling to praise Saracen intelligence based upon climate theory. Their solution, however, was to represent the religious Other (Muslims in hot regions) as cunning, yet timorous, infusing the classical notion of climate with religion, as their devious behaviour was related to heresy.

We can see the intermingling of climate theory with religious distinctions in a number of twelfth- and early thirteenth-century sources. In classical climate theory, timidity was explained by referring to a person's thin blood, whereas fearless bravery on the battlefield was caused by thick blood.[63] In William of Malmesbury's *Deeds of the English Kings*, this theory was applied directly to the Saracen's timidity. Notable especially is the mention of poison in this respect, as it conjured up biblical associations of deception and the source of bodily corruption[64]:

> The least valiant of men, and having no confidence in hand-to-hand combat, love fighting on the run [. . .] his bolts having drunk their fill of liquid poison, it is venom and not valour that brings death to the man they strike. If he achieves anything, therefore, I would ascribe it to fortune and not fortitude [. . .] In fact it is very well known that every nation born in the Eastern clime is dried up by the great heat of the sun; they may have more good sense, but they have less blood in the veins, and that is why they flee from battle at close quarters: they know that they have no blood to spare.[65]

The same can be discerned in Gerald of Wales' concept of East and West, where weakness, wealth and poison in the East contend with bravery, health and strength in the West. In the *Topography of Ireland*, men in the East use poison instead of violence in order to achieve success, and guile rather than physical strength. With rhetorical flourish, Gerald states the

East–West binary in climatic terms: "There [the East] the atmosphere is serene, here it is salubrious; there the people are fine-witted; here their minds are robust; there they arm themselves with poisons, here with manly vigour; there they are crafty, here bold in war."[66] In *On the Instruction of Princes*, Gerald of Wales further interlaces classical climate theory and religious thought with the theory that the devil adjusts heresy to the nature of the climate. Thus, Muhammad enticed the Arabs to enter into polygamous relationships because he knew Easterners to be lustful, dwelling in a hot region. The Cathars similarly lured avaricious men in the cold climes to not pay tithes.[67] Again, in the *Deeds of God through the Franks*, the monk Guibert of Nogent applies climate theory to heresy in the East:

> However, the faith of the Easterners, which has never been stable, but has always been variable and unsteady, searching for novelty, always exceeding the bounds of true belief, finally deserted the authority of the early fathers. Apparently, these men, because of the purity of the air and the sky in which they are born, as a result of which their bodies are lighter and their intellect consequently more agile, customarily abuse the brilliance of their intelligence with many useless commentaries.[68]

From this arose many heresies and plagues, the land producing vipers and nettles.[69]

Positioning the East as a region of poison and the birthplace of heresy due to its climate was one form of framing religious differences within a biological discourse of 'physiological corruption'. Given the emotive charge, the 'embodiment' or biological construction of religious differences—which were and are frequently confused or conflated with ethnicity (the Saracen, for example, was used as an umbrella term for Muslims)—could erect boundaries between religious-ethnic groups that were difficult to transcend. This embodiment of religious difference was applied not only to the geographical Other, but also *within* a geographical space, according to humoural type. This led to discussions on bodily corruption in relation to religion and sin, especially with regard to Jews, heretics and lepers. Indeed, some monks and clerics even related the Fall and the 'decay' of species to complexional imbalance, with sin causing ill-health, melancholic complexions, and ugliness.

Corruption of the humours and religion

Ninth-century Irish theologian John Scottus Eriugena (c. 815–c. 870) was one of the first medieval thinkers to explicitly interweave environmental theory with the question of the diversity of the human race and early man.[70] In *The Division of Nature*, John Scottus explains that had Adam not sinned, he would not have been split into two different sexes. John Scottus is adhering to the variant myth that Eve was created after Adam's original sin. No longer in his primordial condition as the image of God, man thereafter suffered further divisions, subject to environmental influences:

> Insofar as the diversity of man is discerned, and of one species from another, and types of stature are different, this does not have its cause in nature [i.e., the primordial form before the Fall] but arises from sin, and from the diversity of place and circumstances of lands, waters, airs, foods, and the like, where people are born and nourished.[71]

In this early and seemingly isolated example, the factors of sin and environment work side by side rather than causally. In twelfth-century thinking, the medicalization of moral-religious

thought subsequently does factor in causality, in the discussion on physical imbalance and ill-health in relation to Adam's original sin.[72] As humoural theory gained influence in western Europe, religious intellectuals developed the theory that the Fall of man had *led* to complexional imbalance. The earliest identified source propounding such ideas is Petrus Alfonsi's *Dialogue against the Jews*, composed by the Spanish convert from Judaism circa 1109, who argued that Adam's illicit desire had brought about an imbalanced complexion, and subsequent mortality, even before he ate from the forbidden fruit. Theologians such as William of Conches (c. 1090–after 1154) repeated this idea in much the same vein.[73] Likewise, Hildegard of Bingen (1098–1179) wrote in her medical treatise *Causes and Cures* that before the Fall, Adam was in perfect health and sanguine. However,

> . . . when Adam knew what was good and by eating the apple did what was evil, black bile rose up within him in reaction to this change. Without the suggestion of the devil, [black bile] is not present in humans, either when they are awake or when they are asleep, because the sorrow and despair which Adam experienced in his transgression arose out of black bile.

The imbalanced melancholic humour is here thus the work of the devil, as were disease and dissolution in general. In addition, a melancholy disposition went hand in hand with wavering beliefs, "for at Adam's fall, the devil scorched the melancholy within him, and in this way [the devil] sometimes makes a person subject to doubt and lack of faith." The devil's suggestions frequently wormed their way into the melancholy man, making him gloomy and desperate. Following Adam's transgression: ". . . the radiance of innocence was darkened in him and his eyes, which before this had seen heavenly things, were snuffed out, and bile changed to bitterness in him and black bile into the blackness of impiety, and he was utterly changed into another form."[74]

Around 1200, Alexander Neckam (1157–1217) wrote his major encyclopaedic work *On the Natures of Things*, probably whilst living as a canon at Cirencester. Alexander writes that before the Fall, man was in command of the animal world. However, after the Fall, in order to remind him of his deceit, man was hindered by even the smallest of beasts, with gnats and stinging flies annoying him, flying into his eyes and fleas keeping him from his sleep. Moreover, before the Fall, there had been no complexional imbalance nor venom, for, as Alexander states, "it should also be known that if man had not sinned, there would be no noxious poison. Likewise every animal would be of temperate complexion in his own genus", although this did not guarantee equality, as "some animals would have a more temperate complexion than others. For before the sin of the primal deceit, Eve was of a temperate complexion, but Adam was the most temperate." Before the Fall, both Adam and Eve were however, in accordance with their individual temperament, well-balanced, although Adam slightly more so than Eve. After the Fall, however, mankind suffered much greater diversity, for although created in the image of God, it was now flawed. Sin had paved the way for temperaments to mutate. For, in Alexander's words: "If then man had not sinned, there would be no [difference of] degree, for a degree is a lapse from the norm. Therefore will it not appear to one versed in physical science that complexions may be changed, although many think this to be impossible?"[75]

Although deemed impossible, complexional change, and ultimately the diversity of mankind, were thus caused by the original sin.[76] Besides the strictly medical discussions on the partially 'innate' nature of complexions—innate yet changeable—the role of sin thus offered a further explanation for the divisions within mankind. It is not difficult to imagine how this shift might shape perceptions of, and relations with, the physically impaired or

infirm, including members of religious groups such as Jews and heretics, whose religious beliefs were subsequently interpreted in physiological terms of supposedly having a melancholy complexion. In the ninth century, Abu Mashar al-Balkhi (Albumasar), under the influence of astrological thought, had already stated that faiths arose under the influence of the conjunctions of planets. Judaism, arising under Saturn, was assigned a melancholy complexion, characterized by fraud, wickedness, envy, perfidy and stubbornness, i.e., typical anti-Jewish stereotypes; this belief was quickly adopted in twelfth-century Latin astrology.[77] In addition, from the twelfth century, Jews might be classified as melancholy as a result of the influence of planetary conjunctions, and as suffering from the *curse* of a 'flux of blood' or haemorrhoids.[78] With the birth of degrees of difference, as a 'lapse from the norm', the liminality of groups such as Jews and heretics was presented as stemming from sin and clothed in the language of disease.

From the thirteenth century, diverging from ancient medical theory, an increasing intermingling and sometimes also tension arises between such medical and theological discussions. The idea of Jewish melancholy, for example, was discussed medically, but in the later thirteenth century also theologically in *quodlibet*-sessions.[79] As Joseph Ziegler has pointed out, in this period, tension was acknowledged between such notions as behaviour being determined by complexion, on the one hand, and the spiritual-religious idea that a person had a rational soul. The solution to this incongruence was to state that the complexion was not the cause but the sign of natural character; the principal causes of a person's character and behaviour remained in the soul, congenital character coming "by divine appointment."[80]

Changeability, religion and rebirth

The question remains, however, to what extent people were considered able to redeem their bodily health (and change ethnicity) through moral and religious rectitude. This is relevant, especially since in medieval Catholicism, people were thought to retain a free will. Consequently, the art of physiognomy was, as Ziegler argues, more about inclinations than fixed dispositions.[81] William of Conches, in his commentary on Macrobius, thus said that although the planets influence predispositions, free will remains intact.[82] Nonetheless, the capacity to achieve an embodied change was not attributed equally to all: especially Jews were considered innately unchangeable. Thus, particularly where the religious Otherness of, for instance, Jews and Saracens is concerned, the idea of free will and mutability often seems to fall short.

In this regard, Denise Buell has emphasized how, despite the fact that Christendom claimed to stretch across the whole of mankind, nonetheless salvation at the same time required a specific 'essence'.[83] In this sense, the idea that the Christian message could be embraced by all was somewhat misleading. In early Christianity, for example in Paul's Letter to the Romans, all members of mankind were indeed presented as equal, 'spiritual' descendants of Jacob and Esau.[84] Many scholars have consequently stressed that *Christianitas* promoted a *transnational* myth of oneness and unity, seldom acknowledging internal differences. In Jeffrey Cohen's view, for example, the Christian ecumenicity was "a universal body unmarked by such differentiations".[85] The universalism of Christendom crossed ethnic boundaries, which was part of its appeal and success.[86] Nonetheless, as Denise Buell argues, within early Christendom, rhetorical strategies were employed using notions of ethnicity to explain what being a member of the Christian community entailed, and much of the rhetoric was clothed in terms of regeneration. Members of the Christian community described themselves as 'reborn' in Christ; becoming a Christian meant 'activating' their very being, developing an "acquirable fixed essence" which all human beings possess and through which one achieves full humanness.

The division of humanity was also presented along genealogical lines, with the traditional medieval division of the earth into three continents inhabited by the descendants of Noah's three sons—Shem's progeny inhabiting Asia, Ham's descendants black Africa, and Japheth's white Christian Europe. As Paul Freedman has demonstrated, this genealogical division also led to ethnic and social categorizations, wherein the cursed descendants of Ham (and Cain) were associated with both the dark-skinned Africans and the peasants tilling the land.[87] The children of Japheth, on other hand, might be considered as Christian progeny. Moreover, some ethnic groups presented themselves as New Israelites, Chosen Peoples.[88]

The rhetoric of rebirth is clearly present in the following twelfth-century passage from a sermon by Raoul Ardent of Poitou (died c. 1200). On the Feast of the Holy Trinity, Raoul, master in theology in Paris, ardently preached on Christian virtues, urging his audience with the words:

> Let us try, each and every one, to rise above the vice of his own people. If you are a Jew, take pains to rise above your innate disbelief. If you are from France, take pains to overcome your innate arrogance. If you are from Rome, take pains to overcome your innate avarice. If you are from Poitou, take pains to overcome your innate gluttony and garrulity, and the likewise applies to the others.[89]

The passage is a homily on John 3, where Nicodemus, a Pharisee, goes to see Jesus in Jerusalem. Jesus tells him that in order to enter the kingdom of heaven, he needs to be reborn. But how can the elderly be reborn, asks Nicodemus, for he cannot return to his mother's womb. Jesus replies that he must be born again not only by the water but by the spirit, a rebirth in Christ through baptism and the Holy Spirit. Nicodemus, Raoul expounds,

> . . . was a Pharisee, from that evil progeny which John the Baptist called a progeny of vipers [. . .] But something good was born of this evil stock, as much as a rose from a thorn [. . .] And therefore, brethren, that nobody is thwarted by his parent's evil, as neither the holiness of your forebears is of benefit to somebody who lives an evil life [. . .] nor is the son responsible for his father's crimes.[90]

The message is clear: through baptism and by receiving the Holy Spirit, man can expunge his innate ethnic vices.

Whether or not one was successful in activating this essence, however, remained a matter of some contention, as it would seem that in Christianity, natural law could be relative. Indeed, according to patristic writers, although human beings were equal at creation, sin had divided humanity.[91] As a result, there was a 'decay of species,' a corruption of health.[92] Social inequality could thus be viewed as the result of vice; social control came from the necessity to curb the 'bestial nature' of those prone to vice.[93] It is especially here where the embodiment of differences comes to the fore as grounds for discrimination and exclusion. This has to do with what Denise Buell has aptly termed "compulsory mutability"—the notion within Christian universalism that change and conversion were compulsory. As Buell points out, early Christian universalizing claims can be termed potentially 'racist' when the religious Other, to whom fixed characteristics are attributed, is exhorted to transform.[94] Discussions about ontological essences were sometimes employed hierarchically, favouring some groups over others and offering rhetoric to marginalize "those who had failed (in different ways) to activate the potential available to all humans."[95] In the later Middle Ages, this notion of the 'inability to transform' was particularly applied to Jews and Muslims. Especially from the fourteenth century, Jewish *conversi* in Spain, although converting to Christianity, were still viewed as

different by nature, arousing suspicion of moral corruption and heresy. Converted Jews and Muslims were accordingly barred from Church and secular offices.[96]

Sometimes these concepts were also intermixed with discussions of skin colour or complexion. As John Block Friedman writes, "Color polarities were easily interchanged with moral polarities."[97] Thus, according to Paulinus of Nola (c. 354–431), the Ethiopian was burnt not by the sun but by sin. Within Christian allegory, the African body in particular could symbolize deformity, black skin being tied up with sin and the devil, as for example in Gregory the Great's *Commentary on Job* (*Moralia in Job*).[98] Blackness also provided "the palimpsest for the racialized representation of Islam, the Saracen at times imagined as a dark-haired, horned, big-nosed, and broad-eared monstrosity with alluring sexual appeal in both geographical and literary sources, such as the *Roman de la Rose*, *Aliscans*, or *Fierabras*."[99]

Biological theory also cut across other social categories. Paul Freedman has demonstrated that the medieval peasant—like the black children of Ham a cursed descendant of Ham or Cain—is often represented as dark-skinned and deformed; in romance he can resemble a beast, or a Moor.[100] Joseph Ziegler has also pointed out that physiognomic treatises, although saying next to nothing about ethnic groups, sporadically make class-specific references about intellectually deficient, hard-skinned peasants.[101] These peasants were said to be damned to a life of toil as a result of sin, caused by the Fall or the curse of Cain, after he had murdered his brother Abel. A possible medical explanation for the peasant's dark-skinned features can also be found in their proximity to the dry element of the earth when tilling the land, as melancholics were dry and cold.

From the above, it is clear that in the later Middle Ages, the 'fixed' nature of people's physical and psychological characteristics was certainly not set in stone. The overlapping groups to whom one belonged (ethnic, religious, social, gendered), the influence of non-naturals such as environment, and divine will, meant that although boundaries hardened under the sway of scientific texts from the twelfth century, the direction in which the pendulum swayed was seemingly determined in particular by religious difference, as religious 'essence' might bar any kind of perceived 'true' change. Nonetheless, to an extent differences remained relative to various external, social, cultural, gendered and ethical factors. As such, the categories remained both fixed and fluent.

Notes

1 See Metzler 2009, 71 for how such ideas influenced late medieval ethnography. This contribution is a reworking of chapter 3 of my unpublished dissertation, cf. Weeda 2012.
2 For a recent study on the theory of the non-naturals and its impact in early modernity, see Cavallo and Storey 2013.
3 Scholarship on the development of humoural theory and medicine in the late Middle Ages is fast expanding. See, for instance, Siraisi 1990; Arikha 2008.
4 For example, melancholy was considered the dominant humour in lepers and Jews; see Demâitre 2007, 160–75, for leprosy, black bile and the role of the non-naturals. For the predominance of black bile in Jews, see Biller 2001; Resnick 2000; Johnson 1998; Thomas 2010; Bauchau 1989.
5 See, for discussions about material aspects of the resurrection of the body in the last days, Boureau 2008; Bynum 1990; for Adam's complexion in Paradise, Ziegler 2001; Klibansky, Panofsky and Fritz Saxl 1964, 78–80.
6 Eliav-Feldon and Ziegler 2009.
7 There is a plethora of publications on ethnicity and ethnic characteristics in late medieval Europe. See, for instance, Bartlett 2006, 2001, 1994; Hoppenbrouwers 2010; Davies 1994, 1995, 1996, 1997, for an overview. For a bibliography on this topic, see Weeda 2014.

8 Biller 2009, 159.
9 Biller 2009, 160–67. An earlier, probably sixth-century, translation of *Airs, Waters, Places* made in Ravenna was seemingly non-influential and little read. Of the twelfth-century translation about twenty manuscripts are extant, pointing to a wide currency. More than a hundred manuscripts of the *Liber pantegni* are extant. Avicenna's *Canon* became a standard textbook in Bologna at the end of the thirteenth century. According to Biller, however, there is only evidence that students were compelled to master the passage on climate as late as 1405. There is, however, evidence that it was also studied at Montpellier in the late thirteenth century.
10 See Kennedy, Irby and Spencer, this volume.
11 For climate theory in the Middle Ages, see especially Eliav-Feldon, Isaac and Ziegler 2009; Metzler 2009, and the special issue of the *Journal of Medieval and Early Modern Studies* 2001; for Antiquity Isaac 2004. Also still useful are Tooley 1953 and especially Glacken 1973. More general remarks on ethnicity and environment can be found in Epstein 2006, chapter 1.
12 Arikha 2008, 5–8.
13 Glacken 1973, 10–12.
14 Klibansky, Panofsky and Saxl 1964, 102.
15 Klibansky, Panofsky and Saxl 1964, 98–123. Groebner 2004, 365, 373 for the concept of an individual complexion in relation to species. Groebner's discussion of the development of complexional types from the interior to exterior focuses on skin colour and marks after 1250.
16 Ziegler 2009, 194; Thorndike 1958. A systematic examination of all late medieval '*complexiones*'-treatises regarding remarks about ethnic groups has yet to be executed.
17 Citation drawn from Tooley 1953, 74.
18 See, especially for the 'embodiment' of Jews in this period, Kruger 2006; Biller 2001, and other references in note 4 above; and chapter 1 in Epstein 2006.
19 Ziegler 2009, 199.
20 See, especially for medical theory, health and environment, Rawcliffe 2013; for the late Middle Ages, see Henderson 2010. For green spaces and health in medieval urban environments, see Rawcliffe 2008.
21 See Harris 1998; Syros 2013.
22 Biller 2009, 167–76.
23 See Lipton 1999, 2014; Higgs Strickland 2003.
24 Friedman 2000, 53–5.
25 Translation by Friedman 2000, 54.
26 Benoît of St Maure, *Chronique des Ducs de Normandie*. I 11 185–203; 131–132; 136–140; 141–143, ed. Fahlin, vol. 1, 5–7. Translation by Friedman 2000, 54.f.
27 Metzler 2009, 88–9.
28 For the dangers of overemphasizing structuralist thinking about the Other, see Nirenberg 1999, 5.
29 Ziegler 2009, 193; Groebner 2004, 368–9; Van der Lugt 2005, 459.
30 Quoted by Thorndike 1958, 398 note 1: "*Sciendum est etiam quod complexio est duplex, quia quedam est iudicialis que inest alicui a principio nativitatis. Alia est complexio acquisita sive fluens, que non inest a principio nativitatis sed acquisita per regimen contrarium illi complexioni*."
31 For the predominant embryological narrative in the later Middle Ages, see especially Ziegler 2007, 74–82. See also van der Lugt and Miramon 2008.
32 Ziegler 2007, 76–7.
33 Ziegler 2009, 189.
34 Ziegler 2007, 86–7.
35 Van der Lugt 2005, 458–60. Ziegler 2007, 73 and 79 discusses the Galenic notion that women also emitted a generative female semen, in contrast to the Aristotelian notion that the embryo is formed from matter from the woman's menses.
36 Ziegler 2007, 87.
37 *Tractatus de complexionibus Magistri Johannis de Nova domo*', 1: "*Item est manifestum ex causis particularibus, ut ex viro phlegmatico generatur phlegmaticus et ex viro cholerico generatur cholericus et maxime si masculus et femella sunt eiusdem complexionis, generantur pueri eiusdem complexionis*" and 3, ed. Seyfert, 297: "*Sequitur de generatione complexionum a similibus, ut quod sanguineus generat sanguinem et nobilis nobilem et ignobilis ignobilem*."
38 Albertus Magnus, *Quaestiones super de animalibus* 18 Quaestio 4: "*Quod parentes nobiliores generant filios nobiliores et meliores, ut patet in equis (. . .) in spermate non solum est virtus corporis,*

sed animae (. . .) ergo cum filii assimilentur parentibus in dispositionibus corporalibus ut plurimum, pari ratione assimilabuntur in dispositione animae, ut sapientiae et scientiae etc."

39 De Miramon 2009, 201–2.

40 De Miramon 2009, 208.

41 Nirenberg 2009, 250–52.

42 ". . . et ideo in una terra sunt plures fures quam in alia." Quoted by Thorndike 1958, 399 n. 5.

43 See *Tractatus de complexionibus Magistri Johannis de Nova domo*, cite or strike "*At si vir et mulier sunt eiusdem complexionis cum nutrimento, tunc generantur pueri eiusdem complexionis, quia tunc sperma descisum et menstruum mulieris nutriens secundum eandem virtutem sanguineus generatur*."

44 As also remarked by Ziegler 2009, 194–5.

45 *Tractatus de complexionibus Magistri Johannis de Nova domo*" 1: ". . . nisi sit variatio mammae et alimenti et loci, quia ista permutant complexionem in genito virtute naturali."

46 *Tractatus de complexionibus Magistri Johannis de Nova domo 3: "Si vero detur nutrici pulchrae et bene complexionatae, convertatur et alteratur natura complexionis in puero. Et hoc est verum si fuerit hoc pro tempore longitudinis. Et propter hoc pueri non sequuntur semper phisonomiam patris vel matris, quia alio sanguine permutati naturaliter nutriuntur*."

47 Ziegler 2009,193–4.

48 Siraisi 1981, 257–61 for discussions among thirteenth-century scientists on this matter.

49 Cf. Glacken 1973, 114–15.

50 Cf. Ziegler 2009, 195.

51 Albertus Magnus, *De natura loci* 1.2, transl. Tilmann 1971, 33: "*Ostendunt autem hoc homines loca sua mutantes secundum contraria climata, quia propter loci inconnaturalitatem infirmantur et destituuntur, et quando redeunt ad loca nativa, recipiunt sanitatem*."

52 Ziegler 2009, 195–6.

53 Albertus Magnus, *De natura loci* 2.3, transl. Tilmann 1971, 104: "*Quippe umor eorum est piger et spissus nec oboedit motui et receptioni formarum animalium. Sunt igitur tales hebetes et stolidi*."

54 See also Glacken 1973, 439.

55 Otto of Freising, *Gesta Friderici* 2.14: "*ex eo forsan, quod indigenis per conubia iuncti filios ex materno sanguine ac terre erisve proprietate aliquid Romane mansuetedinis et sagacitatis trahentes genuerint, Latini sermonis elegantiam morumque retinent urbanitatem.*"

56 Bartholomaeus Anglicus, *De proprietatibus rerum* 15.122, '*De Pictavia*': "*Cuius gens, lingua et moribus Galliarum provinciis est permixta, ideo quamvis a primis Pictis hoc habeant illius gentis nationes, ut sint natura fortes, corpore elegantes, hoc a Gallicis tamen quibus mixti sunt, contraxerunt ut animo sint feroces et ingenio prae aliis vicinis gentibus acriores*."

57 Bartlett 2006, 203.

58 Ziegler 2009, 196; Van der Lugt 2005, 455–6. For skin colour and medieval peasants, see Freedman 1999.

59 Van der Lugt 2005, 452–3. Albertus Magnus says that colour was an external sign of physiology; those in the torrid region, having an abundance of yellow bile (choleric), are naturally agile and dry because of the evaporation of their vital spirits due to the heat; they will die at a young age, and are less fertile than people in the North. Cf. Albertus Magnus, *De natura locorum* 2.3.

60 Albertus Magnus, *De natura loci* 2.3, transl. Tilmann 1971, 101–2: "*nimia siccitate rugosa, sicut grana piperis, et nigra multum propter ipsorum caliditatem (. . .) nigrescunt corpora eorum propter sanguinis sui adustionem (. . .) Licet autem huiusmodi nigri aliquando nascantur etiam in aliis climatibus, sicut in quarto vel in quinto tamen nigredinem accipiunt a primis generantibus, quae complexionata sunt in climatibus primo et secundo, et paulatim alterantur ad albedinem, quando ad alia climata transferuntur*."

61 Isaac 2004, 62.

62 Ptolemy *Tetrabiblos* 2.2. On the general scheme of Ptolemy's determinism, see Komokorowska, this volume.

63 See Irby and Spencer, this volume. In the first century BC, Vitruvius had discussed the influence of environment on man's physical and mental state with regard to the ideal location of houses, stating that the southerners, "because of their thin blood, fear to resist the sword, but endure heat and fever without fear, because their limbs are nourished by heat. Those persons who are born under a northern sky, are weak and more timid in face of fever, but fearlessly resist the sword owing to their fullness of blood", Vitruvius, *De Architectura* 6.1.3–4, trans. Granger, 13.

64 I refer, for instance, to Genesis 3.

65 William of Malmesbury, *Gesta Regum Anglorum* 6.347, trans. Mynors, Thomson and Winterbottom 1998, vol. 1, 600–603: "*homines inertissimi, et qui, comminus pugnandi fidutiam non habentes, fugax bellum diligent (. . .) tela mortifero suco ebria, in homine quem percutit non virtus sed virus mortem facit. Quicquid igitur agit, fortunae, non fortitudini attribuerim (. . .). Constat profecto quod omnis natio quae in Eoa plaga nascitur, nimio solis ardore siccata, amplius quidem sapit, sed minus habet sanguinis; ideoque vicinam pugnam fugiunt, quia parum sanguinis se habere norunt*."

66 Gerald of Wales, *Topographia Hibernica* 1.37, transl. based on Thomas Forestor's translation at http://www.yorku.ca/inpar/topography_ireland.pdf, 31: "*Ibi aeris serenitas, hic salubritas. Ibi gens arguta, hinc robusta. Ibi venenis dimicatur, hic viribus. Ibi ars, hic Mars*." Cf. Bartlett 2006, 164–7.

67 Gerald of Wales, *De principis instructione* 1, Bartlett 2006, 166–7.

68 Guibert of Nogent, *Gesta Dei per Francos* 1.2, (Turnhout 1996), 89–90, transl. Robert Levine 1997, 26: "*Orientalium autem fides cum semper nutabunda constiterit et rerum molitione novarum mutabilis et vagabunda fuerit, semper a regula verae credulitatis exorbitans, ab antiquorum Patrum auctoritate descivit. Ipsi plane homines pro aeris et celi cui innati sunt puritate cum sint leviores corpulentiae et idcirco alacrioris ingenii, multis et inutibilis commentis solent radio suae perspicacitatis abuti*."

69 See also Jones-Lewis, this volume, 192–4.

70 Glacken 1973, 262. For earlier discussions about human procreation and sin, see Boas 1978, 70–71.

71 The full quotation from John Scottus, *De divisione naturae* 2.7, *Patrologia Latina* 122, 533A-533B: "*Sectiones dicit circa hominem post peccatum non solum divisionem in masculum et feminam verum etiam in multiplices varietates qualitatum et quantitatum differentiarumque unius formae. Siquidem diversitas hominum a seipsis, qua uniuscujusque species ab aliis discernitur, et staturae modus variatur, non ex natura provenit, sed ex vitio, et diversitate locorum et temporum terrarum, aquarum, aërum, escarum, ceterarumque similium, in quibus nascuntur et nutriuntur. De diversitate morum cogitationumque superfluum est dicere, cum omnibus manifestum sit, ex divisione Naturae post peccatum initium sumpsisse*."

72 See Ziegler 2001.

73 Resnick 2005, 191–5. Cf. William of Conches, *Dragmaticon Philosophiae* 6.13 2–3, (Turnhout 1997), 227. See Ziegler 2001, 213 n. 35 for further reference.

74 The full citation in Hildegard of Bingen, *Causae et curae* 2: "*Nam cum Adam bonum sciuit et pomum comedendo malum fecit, in vicissitudine mutationis illius melancholia in eo surrexit, que sine suggestione dyaboli non est in homine tam uigilante quam dormiente, quia tristitia et desperatio ex melancholia ascendant, quas Adam in transgressione sua habuit. (. . .) Quoniam dyabolus in casu Ade melancoliam in ipso conflauit, qua hominem aliquando dubium et incredulum parat. (. . .) Cum autem Adam transgressus est, splendor innocentie in eo obscuratus est, et oculi eius, qui prius celestia videbant, extincti sunt, et fel inmutatum est in amaritudinem et melancholia in nigredinem impietatis, atque totus in alium modum mutatus est*." Translation in Wallis 2010, 357–8. See also Boas 1978, 75–7.

75 Alexander Neckam, *De naturis rerum* 2.156: "*Sciendum est etiam quod, si non peccasset homo, nullum venenum nocivum esset. Esset item omne animal temperate complexionis in suo genere. Nihilominus tamen esset aliquod animal temperatioris complexionis alio. Ante peccatum enim primae praevaricationis temperatae complexionis erat Eva, sed Adam temperatissimae. Si igitur non peccasset homo, nihil esset gradus; est namque gradus elongatio a temperantia. Nonne igitur in physicis instructo videbitur quod complexiones mutatae sint, quamvis hoc multi censeant esse impossibile?*" Translation from Boas 1978, 82–5.

76 These notions seem to faintly foreshadow much later classifications of mankind. Notably, in the eighteenth century, French philosopher Georges-Louis Buffon (1707–88) addressed the issue of how the descendants of Adam and Eve, expelled from paradise and living in inferior climates, suffered 'degeneration.' Buffon believed both in monogenesis and acquired hereditary characteristics as a result of environmental influences, for human beings, dispersed across the earth, "underwent divers changes, from the influence of climate, from the difference of food, and of the mode of living, from epidemical distempers, as also from an intermixture, varied *ad infinitum*, of individuals more or less resembling each other." Buffon's theory seems remarkably similar to the beliefs discussed above. See Banton 1987, 5 and Isaac 2004, 8–11.

77 Biller 2001, 140–41 and 154 for the Latin translation of Albumasar. Islam (the Saracen faith) was said to have arisen under Venus; Christianity under Mercury. In 1143, Hermann of Carinthia (or Dalmatia) repeated this in his *De Essentiis*, and also wrote a treatise on the generation and nutritional care of Muhammad. According to Biller, more than a hundred Latin manuscripts are

extant of another text containing the same statement, by the Arabic writer Alchabitius, which also became a curriculum text at Bologna at some time.

78 Biller 2001, 140–46. See also the references mentioned in note 4 above. The fourteenth-century notion of the innate blood of Jewish *conversi* is unrelated; cf. Nirenberg 2009; for the 'immutability' of Jews, cf. further Elukin 1997; see, for the notion of a Christian ontology, also especially Buell 2009.

79 Biller 2001, 150.

80 Ziegler 2007, 64–6; Ziegler 2009, 189–90.

81 Ziegler 2009, 190.

82 Quoted by Klibansky, Panofsky and Saxl 1964, 182. On free will and environment, see Gibbons, this volume.

83 Buell 2009, 125–6.

84 Boureau 2008, 70.

85 Cohen 2001, 116.

86 Buell 2009, 111.

87 For dark-skinned peoples and the belief that they were descendants of Ham, see Goldenberg 2005); Braude 2002; for serfs' descent from Ham and Cain, see Freedman 1999, 86–104. See also Smith 2003.

88 Garrison 2000, 114–61; Smith 2003; Garrison 2006, 275–314; and Gabriele 2012.

89 Raoul Ardent, *Homilia* 2.2 "In die Trinitatis", *Patrologia Latina* 155 1949C–D: "*Conemur unusquisque vitium populi sui superare. Si Judaeus es, stude Judaeis innatam incredulitatem superare. Si Gallus es, stude Gallis innatam superbiam superare. Si Romanus es, stude Romanis innatam avaritiam superare. Si Pictavinus es, stude Pictavinis innatam ingluviem et garrulitatem superare, et similiter de caeteris*." Cf. Meyvaert 1991, 748.

90 Raoul Ardent, *Homilia* 2.2 "In die Trinitatis", Patrologia Latina 155 1949B–C: "*Ex Pharisaeis, ex illa videlicet mala progenie, quam Joannes Baptista progeniem viperarum vocat. (. . .) Ex mala igitur stirpe, tanquam rosa de spina natum est aliquod bonum (. . .). Et hoc ideo, fratres, ut nemo causetur malitiam parentum sibi obstare, sicut nec sanctitatem parentum sibi male viventi prodesse (. . .) quoniam filius non portabit iniquitatem patris*."

91 Freedman 1999, 74; Glacken 1973, 261.

92 Friedman 2000, 92–3.

93 Freedman 1999, 75–7.

94 Buell 2009, 121.

95 Idem, 123.

96 Nirenberg 2009, 242. See also Ziegler 2009, 198.

97 Friedman 2000, 64.

98 However, Hahn 2001 points out that blackness did not always have a negative connotation. In the German version of *Mandeville's Travels*, for instance, blackness signifies beauty. Within a monastic context, Bernard of Clairvaux elaborates on the famous words of the bride in the Song of Songs, "I am black but beautiful" (1:5), blackness allowing "the soul to acknowledge and internalize an aspect of self-loathing as means of achieving wholeness." Abelard, too, makes erotic allusions to blackness as an ingredient of desire. See also Friedman 2000, 64–5.

99 Cohen 2001, 116–20, for an extensive discussion of dark skin colour and otherness regarding Saracens and Jews.

100 Freedman 1999, 139–40.

101 Ziegler 2009, 188.

Bibliography

Arikha, Noga. 2008. *Passions and Tempers: A History of the Humours.* New York: HarperCollins.

Banton, Michael. 1987. *Racial Theories*. Cambridge: Cambridge University Press.

Bartlett, Robert. 1994. *The Making of Europe: Conquest, Colonization and Cultural Change, 950–1350*. London: Allen Lane/Penguin Press.

——. 2001. "Medieval and Modern Concepts of Race and Ethnicity." *Journal of Medieval and Early Modern Studies* 31: 39–56.

——. 2006. *Gerald of Wales: A Voice of the Middle Ages.* Stroud: Clarendon.

Bauchau, Bénédicte. 1989. "Science et Racisme: Les Juifs, la Lèpre et la Peste." *Stanford French Review* 13: 21–35.

Biller, Peter. 2001. "A 'Scientific' View of Jews from Paris around 1300." *Gli Ebrei el le Scienze, Micrologus* 9: 137–68.

——. 2009. "Proto-racial Thought in Medieval Science." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 157–80. Cambridge: Cambridge University Press.

Boas, George. 1978. *Essays on Primitivism and Related Ideas in the Middle Ages*. Baltimore, MD and New York: Johns Hopkins University Press.

Boureau, Alain. 2008. "Hérédité, Erreurs et Vérité de la Nature Humaine (XIIe–XIII siècles)." In *L'Hérédité entre Moyen Âge et Époque Modern. Perspectives Historiques*, edited by Maaike van der Lugt and Charles de Miramon, 67–82. Florence: Sismel.

Braude, Benjamin. 2002. "Cham et Noé. Race et Esclavage Entre Judaïsme, Islam et Christianisme." *Annales. Sciences Sociales* 57: 93–125.

Buell, Denise Kimber. 2009. "Early Christian Universalism and Modern Racism." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 109–31. Cambridge: Cambridge University Press.

Bynum, Caroline Walker. 1990. "Material Continuity, Personal Survival, and the Resurrection of the Body: A Scholastic Discussion in Its Medieval and Modern Contexts." *History of Religions* 30: 51–85.

Cavallo, Sandra and Tessa Storey. 2013. *Healthy Living in Late Renaissance Italy*. Oxford: Oxford University Press.

Cohen, Jeffrey J. 2001. "On Saracen Enjoyment: Some Fantasies of Race in Late Medieval France and England." *Journal of Medieval and Early Modern Studies* 31: 113–46.

Davies, R.R. 1994. "Presidential Address: The Peoples of Britain and Ireland 1100–1400. I. Identities." *Transactions of the Royal Historical Society* 4: 1–20.

——. 1995. "Presidential Address: The Peoples of Britain and Ireland 1100–1400. II. Names, Boundaries and Regnal Solidarities." *Transactions of the Royal Historical Society* 5: 1–20.

——. 1996. "Presidential Address: The Peoples of Britain and Ireland 1100–1400. III. Laws and Customs." *Transactions of the Royal Historical Society* 6: 1–23.

——. 1997. "Presidential Address: The Peoples of Britain and Ireland 1100–1400. IV. Language and Historical Mythology." *Transactions of the Royal Historical Society* 7: 1–24.

De Miramon, Charles. 2009. "Noble Dogs, Noble Blood: The Invention of the Concept of Race in the Late Middle Ages." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 200–226. Cambridge: Cambridge University Press.

Demâitre, L. 2007. *Leprosy in Premodern Medicine: A Malady of the Whole Body*. Baltimore, MD: Johns Hopkins University Press.

Eliav-Feldon, Miriam, Benjamin Isaac and Joseph Ziegler (eds), 2009. *The Origins of Racism in the West*. Cambridge: Cambridge University Press.

Elukin, Jonathan M. 1997. "From Jew to Christian? Conversion and Immutability in Medieval Europe." In *Varieties of Religious Conversion in the Middle Ages*, edited by James Muldoon, 171–89. Gainesville: University Press of Florida.

Epstein, Steven A. 2006. *Purity Lost: Transgressing Boundaries in the Eastern Mediterranean, 1000–1400*. Baltimore, MD: Johns Hopkins University Press.

Freedman, Paul. 1999. *Images of the Medieval Peasant.* Chicago, IL: Stanford University Press.

Friedman, John B. 2000. *The Monstrous Races in Medieval Art and Thought*. New York: Harvard University Press.

Gabriele, M. 2012. "The Chosen Peoples of the Eleventh and Twenty-First Centuries." *Relegere: Studies in Religion and Perception* 2: 281–90.

Garrison, M. 2000. "The Franks as the New Israel? Education for an Identity from Pippin to Charlemagne." In *The Uses of the Past in the Early Middle Ages*, edited by Y. Hen and M. Innes, 114–61. Cambridge: Cambridge University Press.

——. 2006. "Divine Election for Nations: A Difficult Rhetoric for Medieval Scholars?" In *The Making of Christian Myths in the Periphery of Latin Christendom (c. 1000–1300)*, edited by L.B. Mortensen, 275–314. Copenhagen: Museum Tusculanum Press, University of Copenhagen.

Glacken, Clarence J. 1973. *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century.* Berkeley and London: University of California Press.

Gerald of Wales, *Topographia Hibernica* 1.37, ed. Dimock, 71, transl. based on Thomas Forestor's translation at http://www.yorku.ca/inpar/topography_ireland.pdf, 31.
Goldenberg, David M. 2005. *The Curse of Ham. Race and Slavery in Early Judaism, Christianity and Islam*. Princeton, NJ and Oxford: Princeton University Press.
Granger, F. (1931). *Vitruvius On Architecture, Books 1–5, 6–10. Loeb Classical Library*. Cambridge, MA: Harvard University Press.
Groebner, Valentin. 2004. "*Complexio*/Complexion: Categorizing Individual Natures, 1250–1600." In *The Moral Authority of Nature*, edited by Lorraine Daston and Fernanco Vidal, 361–83. Chicago, IL and London: University of Chicago Press.
Guibert de Nogent, *"Dei gesta per Francos" et cinq autres textes*, ed. RBC Huygens. (Corpus Christianorum, Continuatio Mediaeualis, 127A.) Turnhout: Brepols, 1996.
Hahn, Thomas. 2001. "The Difference the Middle Ages Makes: Color and Race before the Modern World." *Journal of Medieval and Early Modern Studies* 31: 1–37.
Harris, J.G. 1998. *Foreign Bodies and the Body Politic: Discourses of Social Pathology in Early Modern England.* Cambridge: Cambridge University Press.
Henderson, John. 2010. "Public Health, Pollution and the Problem of Waste Disposal in Early Modern Tuscany." In *Le Interazioni fra Economia e Ambiente Biologico nell'Europa Preindustriale Secc. XIII–XVIII. Economic and Biological Interactions in Pre-Industrial Europe from the 13th to the 18th Centuries*, edited by S. Cavaciocchi, 373–82. Florence: Firenze University Press.
Higgs Strickland, Debra. 2003. *Saracens, Demons and Jews: Making Monsters in Medieval Art*. Princeton, NJ: Princeton University Press.
Hoppenbrouwers, Peter. 2010. "The Dynamics of National Identity in the Later Middle Ages." In *Networks, Regions and Nations: Shaping Identities in the Low Countries, 1300–1650*, edited by R. Stein and J.S. Pollmann, 19–42. Leiden: Brill.
Isaac, Benjamin. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.
Johnson, Willis. 1998. "The Myth of Jewish Male Menses." *Journal of Medieval History* 24: 273–95.
Klibansky, Raymond, Erwin Panofsky and Fritz Saxl. 1964. *Saturn and Melancholy: Studies in the History of Natural Philosophy, Religion and Art*. London: Nelson.
Kruger, Steven F. 2006. *The Spectral Jew: Conversion and Embodiment in Medieval Europe*. Minneapolis: University of Minnesota Press.
Levine, R. (transl.). 1997. *The Deeds of God through the Franks: A Translation of Guibert de Nogent's* Gesta Dei per Francos. Rochester: Boydell Press.
Lipton, Sara. 1999. *Images of Intolerance: The Representation of Jews and Judaism in the Bible Moralisée.* Berkeley: University of California Press.
——. 2014. *Dark Mirror: The Medieval Origins of Anti-Jewish Iconography*. New York: Macmillan Publishers.
Metzler, Irina. 2009. "Perceptions of Hot Climate in Medieval Cosmography and Travel Literature." In *Medieval Ethnographies: The Expansion of Latin Europe, 1000–1500*, edited by Joan-Pau Rubiés, 69–105. Farnham: Ashgate.
Meyvaert, P. 1991. "Rainaldus est Malus Scriptor Francigenus: Voicing National Antipathy in the Middle Ages." *Speculum* 66: 743–63.
Mierow, Charles C. (transl.) 1994. *The Deeds of Frederick Barbarossa (Gesta Friderici I Imperatoris)*. Toronto: University of Toronto Press.
Mynors, R.A.B., R.M. Thomson and M. Winterbottom (ed. and transl.). 1998. William of Malmesbury, *Gesta Regum Anglorum*. Oxford: Clarendon Press (2 volumes).
Nirenberg, David. 1999. *Communities of Violence: Persecution of Minorities in the Middle Ages*. Princeton, NJ: Princeton University Press.
——. 2009. "Was There Race before Modernity? The Example of 'Jewish' Blood in Late Medieval Spain." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 232–64. Cambridge: Cambridge University Press, 2009.
Rawcliffe, Carole. 2008. "'Delectable Sightes and Fragrant Smelles': Gardens and Health in Late Medieval and Early Modern England." *Garden History* 36: 3–21.
——. 2013. *Urban Bodies: Communal Health in Late Medieval English Towns and Cities.* Woodbridge: The Boydell Press.
Resnick, Irven M. 2000. "Medieval Roots of the Myth of Jewish Male Menses." *Harvard Theological Review* 93: 241–63.

——. 2005. "Humoralism and Adam's Body: Twelfth-Century Debates and Petrus Alfonsi's *Dialogus Contra Judaeos*." *Viator* 36: 181–95.
Seyfert, Werner. 1928 'Ein Komplexionentext einer Leipziger Inkunabel (angeblich eines Johann von Neuhaus) und seine handschriftliche Herleitung aus der Zeit nach 1300', Archiv für Geschichte der Medizin 20: 272–299. and 372–389.
Siraisi, Nancy G. 1981. *Taddeo Alderotti and His Pupils: Two Generations of Italian Medical Learning.* Princeton, NJ: Princeton University Press.
——. 1990. *Medieval & Early Renaissance Medicine: An Introduction to Knowledge and Practice.* Chicago, IL and London: University of Chicago Press.
Smith, Anthony D. 2003. *Chosen Peoples*. Oxford: Oxford University Press.
Syros, Vasileios. 2013. "Galenic Medicine and Social Stability in Early Modern Florence and the Islamic Empires." *Journal of Early Modern History* 17: 161–213.
Thomas, James M. 2010. "The Racial Formation of Medieval Jews: A Challenge to the Field." *Ethnic and Racial Studies* 33: 1737–55.
Thorndike, Lynn. 1958. "De complexionibus." *Isis* 49: 398–408.
Tilmann, Jean Paul. (transl.). 1971. *An Appraisal of the Geographical Works of Albertus Magnus and his Contributions to Geographical Thought*. Ann Arbor: University of Michigan Press.
Tooley, Marian J. 1953. "Bodin and the Medieval Theory of Climate." *Speculum* 28: 64–83.
van der Lugt, Maaike. 2005. "La Peau Noire dans le Science Médiévale." *Micrologus: Natura, Scienze e Società Medievali* 13: 439–75.
van der Lugt, Maaike and Charles Miramon. 2008. *L'Hérédité entre Moyen Âge et Époque Moderne: Perspectives Historiques*. Florence: Sismel.
Wallis, Faith (ed. and transl.). 2010. Medieval Medicine: A Reader. Toronto: University of Toronto Press.
Weeda, Claire, 2012. "Images of Ethnicity in Later Medieval Europe". PhD diss.: University of Amsterdam.
——. 2014. "Ethnic Identification and Stereotypes in Western Europe, c. 1100–1300." *History Compass* 12: 586–606.
Ziegler, Joseph. 2001. "Medicine and Immortality in Terrestrial Paradise." In *Religion and Medicine in the Middle Ages*, edited by Peter Biller and Joseph Ziegler, 201–42. York: York Medieval Press and The Boydell Press.
——. 2007. "The Scientific Context of Dante's Embryology." In *Dante and the Human Body: Eight Essays*, edited by John C. Barnes and Jennifer Petrie, 61–88. Dublin: UCD Foundation for Italian Studies/Four Courts Press.
——. 2009. "Physiognomy, Science, and Proto-Racism 1200–1500." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 181–99. Cambridge: Cambridge University Press.

7

THE GREEK THEORY OF CLIMATE IN MEDIEVAL JEWISH THOUGHT

Absorption, influence and application

Abraham Melamed

The theory of climate, as first formulated by the Greeks and absorbed in medieval culture, contains two interrelated components: the geographic-astronomical context, and the anthropological-political context. According to the first component, the earth (which meant for them the northern hemisphere)[1] is divided into five or seven climatic zones, from the hot equator to the freezing North Pole. The extreme climates are located in the outermost edges of the northern hemisphere, while the more moderate climates are located at the center; the fourth climate, located at the exact center, is the best and most temperate climate. This theory assumes that the changing locations of the stars and constellations vis-à-vis the earth controls the climatic zones. A strong astrological component was introduced here, and acquired much influence later on.

The second component is the anthropological-political context. This theory assumes that geographic, climatic, and environmental conditions dictate human nature and capabilities. Thereby, they necessarily influence the culture and political institutions of the various people who evolve in the climatic zones. This explains the great differences among various peoples. The nature and value of a given human culture is determined by the kind of climatic zone in which every *ethnos* lives.[2] Our discussion will focus on this context. This is a clear case of geographic determinism, which derives from astronomical (even astrological) determinism.[3] This assumption created a serious problem concerning the belief in free will, which greatly troubled some medieval scholars, as will be shown below.

On the basis of the Aristotelian ethical theory of the golden mean, Greek scholars concluded that a sophisticated human culture could evolve only in the most temperate climate—which means the fourth. They naturally considered Greece to be located exactly in the middle fourth zone, thus, the Greeks were necessarily superior over all barbarians. This is clearly formulated in Aristotle's *Politics* 7:6, 1327b:

> Concerning the citizen population, we stated earlier what the maximum number should be. Now, let's discuss the innate characters of that population. One could potentially learn this from observing the most famous cities among the Greeks and how the rest of the inhabited world is divided up among the various peoples. The peoples living in cold climates and Europe are full of courage but lack intelligence

> and skill. The result is a state of continual freedom but a lack of political organization and ability to rule over others. The peoples of Asia, however, are intelligent and skilled, but cowardly. Thus they are in a perpetual state of subjection and enslavement. The races of the Greeks are geographically in between Asia and Europe. They also are "in between" character-wise sharing attributes of both—they are intelligent and courageous. The result is a continually free people, the best political system, and the ability to rule over others (if they happen to unify under a single constitution).[4]

Most medieval scholars accepted the scientific validity of this theory. The debate among them focused on the definition of the above-mentioned ideal climate. We can distinguish here between two basic positions. The first position, derived from the Aristotelian theory of the golden mean, divided the seven climates into three basic zones: two extreme—the hot equator and the freezing pole, and the moderate climate located exactly in the middle fourth zone. According to this division, each of the extreme climates will produce ill-tempered, thus deficient humans, and consequently primitive cultures. The nature and culture of the people of the north and the south will be different, due to the different climatic conditions, as Aristotle has indicated, but both will be deficient. Only the moderate middle climate will produce well-tempered humans, and consequently a perfect human society.

The other position distinguished between two climatic zones only: the harsh and the moderate. Based on a pessimistic view concerning human nature, it substantially differed from the first position by arguing, particularly, that a harsh environment will produce industrious and energetic people, since it compels humans to work and make an effort in order to provide for their basic needs and advance human culture. A comfortable environment, where humans can easily provide, will keep them lazy and impotent, and thus prevent the development of a sophisticated human culture. This position appears already in Herodotus,[5] and is later especially identified with the pessimistic Machiavelli, who strongly rejected the Aristotelian view.[6]

The second view was mainly used in discussions of the social nature of humans and their need to live in an ordered socio-political organization. The first view, which will be our main concern here, was used as a splendid vehicle for theories on the cultural and political superiority of lands and people. Greeks based the claim of their cultural superiority on this theory, as we found above in Aristotle.[7] The Muslim Pure Brethren identified Iraq as the perfect land, while the theory of the *Arabiyya* located it in the Arabian Peninsula.[8] The theory on the superiority of the Venetian republic, developed during the Renaissance, was also based on climatological arguments.[9] Bodin used this theory in the seventeenth century in order to prove the superiority of the French political system.[10] Some Anglophiles even dared to identify Britain, no less, as a land of the tempered climate, where "The summer is not too hot, the winter not too long".[11] Likewise this theory was also employed by medieval Jewish scholars in order to prove the uniqueness and superiority of the land of Israel and the Jewish people. Almost everybody accepted unquestionably the validity of the climatic theory until the great geographic discoveries and the advent of modern science; the debate among scholars concerned the question where exactly was the tempered fourth climate located. Scholars of different nations identified it in their own countries, even when it was quite farfetched, all in order to give a 'scientific' basis to the claim that their own culture is superior. Medieval Jewish scholars eagerly joined the debate.

The rabbinic tradition

Traces of the Greek theory of climate already infiltrated early rabbinic literature, and were employed as additional proof for the claim of the uniqueness and superiority of the land and the people of

Israel. The famous rabbinic dictum: "The air of the land of Israel makes one wise" (*Babylonian Talmud*, *Tractate Bava Batra* 158b) is clear manifestation of the diffusion of this theory. The word 'air' (*avira* in Aramaic, *avir* in Hebrew), means here 'climate.' Scholars have already speculated that the Sages were influenced by Hippocrates' climatic theory, especially *On Airs, Waters and Places*, which emphasize environmental influences on humans.[12] On the basis of this theory, they also concluded that prophecy could only exist in the land of Israel. Accordingly, the land of Israel, Jerusalem at its center, and the temple in its center, are situated by the Sages precisely at the center of the world. In *B.T. Tractate Derech Eretz Zuta* (ch. 9), we read: "This world resembles the eyeball of a man. The white is the ocean that surrounds the whole land; the black is the world; the circle in the black is Jerusalem, and the image (the pupil) in the circle is the Temple."

The Sages were using here an organic analogy, which parallels the organs of the human body with the structure of the universe; both operate on the same divine plan.[13] Using the same organic analogy, the argument of centrality is even more emphasized in the later *Midrash Tanhuma, Qedoshim*, *Leviticus* 7:

> Just as a navel is set in the middle of a person, so is the land of Israel the navel of the world. Thus it is stated (*Ezekiel* 38:12): "who dwell on the navel (Heb. *tabur*) of the earth." The land of Israel sits at the center of the world; Jerusalem is in the center of the land of Israel; the sanctuary is in the center of Jerusalem; the Temple building is in the center of the sanctuary; the ark is in the center of the Temple building and the foundation stone, out of which the world is founded, is before the Temple building (Buber ed.).[14]

Another tradition located Tiberias at the center of the world: "And why is it called Tiberias? Because it is situated in the very center (*tabura*) of the land of Israel" (*B.T. Tractate Megilah* 6a). This is based on the phonetic resemblance between the name of this city and the Hebrew term for 'navel' (*tabur*), and by implication also 'center.' The location at the precise geographic center, at the navel (*omphalos*) of the world—parallel to the Greek fourth climatic zone—is the reason why particularly the air of the land of Israel makes a person wise. The Sages borrowed an originally Greek theory in order to prove the superiority of the Jewish culture over that of the pagan, thus 'barbarian', Greeks.

The Middle Ages: Between Judah Halevi and Maimonides

The Greek geographical and medical literature on this subject, mainly Hippocrates and Galen,[15] was translated into Arabic in the great translation project of the eighth to the tenth centuries, and its influence was widespread.[16] Jewish scholars who lived in Muslim lands between the tenth and thirteenth centuries—from Baghdad in the east to Cordova in the west were strongly influenced by the Arabic translations and commentaries of the Greek sources, and applied it to issues which were relevant for them. They combined the Greek theory—as transmitted to Arabic with the rabbinic theories on the superiority of the land of Israel and the Jewish people discussed above. Many Jewish scholars of this period were strongly influenced by this theory, and absorbed it into their philosophical and theological systems. There is a great variety of expressions of the influence of the climatic theory on Jewish scholars.[17] Two main examples, by two of the most important and influential Jewish scholars of this period—Judah Halevi and Maimonides—will suffice to demonstrate the manner by which this theory was absorbed. These two scholars greatly differed in their theological and philosophic outlook. Still, both fully accepted the Greek theory of climate, which only proves its deep penetration into their *weltanschauung*. They applied it, however, in different manners to the Jewish context, due to these differences of opinion.

Halevy's *Book of the Kuzari*, composed in Muslim Spain in the first half of the twelfth century, is a philosophic dialogue charting the search of the king of Kuzar after the true religion. The king approaches four wise men in his search, in the following order: a philosopher, a Christian, a Muslim and finally, only by default, after all three disappointed him, a Jew. The philosopher presents a basically Aristotelian worldview. Concerning the factors that shape the character and abilities of a person, he lists the combination of genetic, environmental and astrological influences. Here the climatic theory comes to the fore: ". . . the influences of winds, soil, foods and water, spheres and constellations."[18] Typically, astronomical (or astrological) influences are added, on the assumption that the conditions on earth are influenced by the movements and constellations of the stars.[19] In the phrasing: "the airs and soil and foods and water," which appears in several additional places throughout the *Kuzari*,[20] scholars have already detected echoes of the title of Hippocrates' treatise *On Airs, Waters, Places*. Consequently, various degrees of humanity evolve in the different zones, from the philosopher who achieves intellectual perfection, and thus fulfills the ultimate purpose of human existence, to the black person who "[. . .] is able to receive nothing more than the human shape and speech (i.e. intellect) in its least developed form."[21] The assumption of the inherent inferiority of black peoples, explained by climatic causes, due to the extreme hot climate (the first) where they dwell, was commonplace in medieval Muslim culture, and also influenced Jewish scholars who were active in this milieu.[22]

Halevi strongly rejected the context in which the philosopher introduced the climatic theory, which is the Aristotelian theory of the eternity of the world, and consequently the deterministic causality that governs it. However, like every other contemporary scholar, he did accept the climatic theory as scientific fact. The same goes for Maimonides. The climatic theory is mentioned a few times in Maimonides' *Guide of the Perplexed*. At the beginning of the famous parable of the king's palace (*Guide* 3: 51), inferior humans, who are in the position of semi-animals, are described as follows:

> Those who are outside the city are all human individuals who have no doctrinal belief; neither one based on speculation nor one that accepts the authority of tradition: such individuals as the furthermost Turks found in the remote North, the Negroes found in the remote South, and those who resemble them from among them that are with us in these climates. The status of those is like that of irrational animals. To my mind they do not have the rank of men, but have among the beings a rank lower than the rank of man but higher than the rank of apes. For they have the external shape and lineaments of a man and a faculty of discernment that is superior to that of the apes.[23]

A similar version of the theory appears elsewhere in the *Guide*, in Maimonides' discussion of the monotheistic belief. Maimonides argues that while cultured nations all embraced monotheism, remnants of paganism survived in the outermost edges of the earth:

> No one is antagonistic to him [Abraham] or ignorant of his greatness, except the remnants of the religious community that has perished, remnants that survive in the extremities of the earth, as for instance the infidels among the Turks in the extreme North and the Hindus in the extreme South. These are the remnants of the religious community of the Sabians, for this was a religious community that extended over the whole earth.[24]

Here the Indians replace black peoples as those who live in the southernmost edges of the earth.[25] Following the Greek theory that he acquired through Muslim intermediaries,

Maimonides distinguishes here among three kinds of climates: two extreme, the cold north and the hot south, and one moderate in the center ("in these climates"). The human groups, which evolved in the extreme climates—the Turks in the north and black-skinned peoples (or Indians) in the south are inferior humans due to the difficult environmental conditions in which they dwell. They have the external physical human shape, but lack intellectual potential, which defines humans as such according to the Aristotelian anthropology to which Maimonides adhered. He emphasizes that these semi-human groups are wanderers, who did not inhabit the same territory. Consequently, they could not develop an organized human society, under the rule of law. They exist 'outside the city.' He indicates that these ethnic groups are but an example of those who dwell in the extreme climates ("those who resemble them"), but the fact that he chose to demonstrate this with these groups in particular, is meaningful.

The inability of humans to develop a sophisticated culture in the extreme climates appears also in Maimonides' introduction to his commentary on the *Mishnah*. Here he introduces the theory of climate in connection with the vain human urge to make a great effort in order to gain unnecessary material benefits: 'There is no madness in the world similar to the madness of humans; weak in soul and constitution, they travel from the beginning of the second of the seven climates till the end of the sixth [. . .] in order to make a little money.'[26]

In order to make some money, humans are ready to constantly travel throughout the climatic zones. Maimonides deliberately restricted the climatic zones in which humans are active to five; he did not include the two extreme ones, since both—the first and the seventh—were considered to be so harsh that only semi-human savages could inhabit them. In two additional places in the *Guide*, Maimonides indirectly uses the climatic theory in the same context. Discussing the historical reasons for various Mosaic laws, he describes the desert—which means the hot climate—as a place which does not allow decent human existence: "For that desert was, as stated in the scripture, a place 'wherein were serpents, fiery serpents, and scorpions, and thirsty ground where there was no water' (Deut. 8:15). Those are places that are very remote from cultivated land and unnatural for man."[27] The desert is described as a place in which devils and madmen dwell:

> For it was one of the generally accepted opinions that the jinn lived in deserts and held converse and appeared there, but did not appear in cities and cultivated places; so whenever a townsman wished to do something in the way of this insanity, he has to go from the city to the desert and to isolated places.[28]

Human societies that exist in the moderate climates, however, are characterized by a sophisticated culture, the rule of law, and an organized social framework. The various human societies discussed in the parable of the king's palace, differ in their beliefs and laws; some, such as the people of Israel, received true divine laws through prophecy, while others, such as the Greeks, follow false human laws. All, however, exist in an organized society.

In the discussion of the anatomy of the speech organs in his *Medical Aphorisms*, Maimonides relates to the connection between the quality of a given language and the climatic influences. He cites Galen's argument that Greek is the most refined language, which is based on the theory that Greece is located exactly at the fourth perfect climate. He basically agreed with Galen and Al Farabi, whom he cites later,[29] that people who dwell in the temperate climate are better shaped and more refined then those who dwell in the extreme climates:

> Moses said: These are Galen's words in regard to the Greek language which he claims is superior to all other tongues of the world. [. . .] It seems to me that the

> words of Galen in this assertion are true. That is, the differences in the pronunciation of the elements of speech, and the differences of the organs of speech, are in accordance with the [nature of the] different climates, meaning the differences in body constitutions and the difference in the forms of their organs, and their internal and external measurements.[30]

He disagreed, however, with Galen's assertion that only Greece is located in the perfect climate. This argument will bring us directly to the question of the climatic connection of the land and people of Israel.

As indicated above, the fact that both Halevi and Maimonides fully absorbed the theory of climate, albeit with great differences in their philosophic and theological views, only proves its full acceptance by contemporary scholars. They, however, applied it in a different manner to the Jewish context, due to these differences. While Halevi fully adopted the theory of climate as a strengthening 'scientific' proof for the uniqueness and superiority of the land and the people of Israel, Maimonides avoided the climatic explanation altogether, and based the claim for uniqueness on a completely different factor.[31] Halevi argued that this uniqueness is based on pre-determined inborn capabilities bestowed by divine revelation upon one people only. This is the so-called 'divine degree,' which is the prophetic potential. Halevi claimed that while the intellectual potential is unique to humans at large,[32] the prophetic potential is bestowed only on the people of Israel (*Kuzari*, 1: 35–42). Maimonides differed; he based the claim for uniqueness on human free will, the conscious acceptance of the true divine revelation, and the commandments of the *Torah*. The heteronomous position Halvei held caused him to look for deterministic explanations, such as the theory of climate. Maimonides, however, held an autonomous position, thus could not accept deterministic explanations, which directly collided with his belief in free will, all the more so when he vehemently rejected the astrological elements associated with theory of climate. He viewed astrology as a false science that necessarily leads to idolatry, and completely negates the basic premises of free will. It was a rare position in the medieval culture.[33]

Following the philosopher's argument at the beginning of the *Kuzari*, that the fulfillment of the human intellectual capacity is determined upon climatic and genetic factors, Halevi argues that the realization of the uniqueness of the people of Israel in the prophetic potential is determined by climatic factors, which is the uniqueness of the land of Israel. The whole long discussion of the uniqueness and superiority of the land of Israel at the beginning of book two of the *Kuzari* (2: 10–22) is based upon the basic assumptions of the theory of climate, from which he deduced the uniqueness of the land. The quality and special characteristics of the plants, animals, and humans in a given territory are conditioned upon environmental factors. In the absence of the proper environmental circumstances, all created things will not be able to flourish and fulfill their specific potential. As the Rabbi tells the King:

> Thou wilt have no difficulty in perceiving that one country may have higher qualifications than others. There are places in which particular plants, metals, or animals are found, or where the inhabitants are distinguished by their form and character, since perfection or deficiency of the soul are produced by the mingling of the elements.[34]

The land of Israel is identified as the one and only place that contains these "higher qualifications." Thus, the people of Israel would be able to prosper and fulfill their unique prophetic potential only while residing in the Promised Land. According to Halevi, fulfilling any potential is conditioned upon the combination of three factors: the genetic makeup, physical (environmental, climatic,

and astrological) conditions, and the efforts one invests in fulfilling his potential. The parable of the vines illustrates this very well:

> How about the hill in which you say that the vines thrive so well? If it had not been properly planted and cultivated, it would never produce grapes. Priority belongs, in the first instance, to the people which, as stated before, are the essence and kernel [of the nations]. In the second instance, it would belong to [the country], on account of the religious acts connected with it, which I would compare to the cultivation of the vineyard. No other place would share the distinction of the divine influence, just as no other mountain might be able to produce good wine.[35]

The analogy is full: the hill with the perfect climatic conditions is analogous to the land of Israel; the specific brand of vine is analogous to the people of Israel, and the proper cultivation of the land and vine is compared to the fulfillment of the divine commandments of the *Torah*.

The Promised Land is situated according to Halevi's calculations exactly at the middle of the fourth perfect climate. The three sons of Noah, progenitors of humanity, dispersed accordingly; the chosen son to the best moderate climate, and the rejected sons to the more extreme climates in the north and south:

> Thus the divine spirit descended from the grandfather to the grandchildren [. . .] He [=Shem] inherited the temperate zone, the center and principle part of which is the Land of Canaan, the land of prophecy. Japheth turned towards north and Ham towards south. The essence of Abraham passed over to Isaac, to the exclusion of the other sons who were removed from the land, the special inheritance of Isaac.[36]

Shem was considered the ancestor of the Israelites, thus inherited the land of Israel, situated at the perfect fourth climate. Japheth, who was considered ancestor of the Greeks and Romans, was sent to the north, while Ham, who was considered ancestor of black Africans, was sent to the south.[37] According to the logic of this theory, the superior son inherited the superior land; the inferior sons inherited the inferior lands. The claim of the inferiority of Greek philosophy vis-à-vis the *Torah*, is based on this claim:

> There is an excuse for the philosophers. Being Greek, science and religion did not come to them as inheritances. They belong to the descendants of Japheth, who inhabited the north, whilst the knowledge coming from Adam, and supported by the divine influence, is only to be found among the progeny of Shem.[38]

The sons of Japheth, dwelling in the cold north, and the sons of Ham, dwelling in the south, would never be able to develop a perfect society and culture, due to the basic inferiority of their genes and land. Halevi, however, assumes, as was conventional, that the descendants of Ham (i.e. black Africans) are much more inferior then the descendants of Japheth (i.e. the Greeks). The Greeks do have intellectual potential, while the Blacks lack any such potential. Only the descendants of Shem, the sons of Israel, who dwell in the perfect territory, could achieve the highest degree of humanity, which is the prophetic degree. As the intellectual potential is what differentiates humans from beasts, the prophetic potential is what differentiates Jews from other humans. As the fulfillment of the intellectual potential is conditioned on climatic factors, so the fulfillment of the prophetic potential in conditioned on the climatic uniqueness of the land of Israel. This is why the God of Israel is called 'God of the Land,' on

which divine providence descended. Halevi also assumed that the land of Israel is where time started to be counted after creation.[39]

These assumptions caused him a serious problem, considering the fact that some of the prophets were active outside the land of Israel. This apparently contradicted his belief that prophecy is possible only in this land. Halevi explains this difficulty by broadening the geographical definition of the term 'Land of Israel,' and by arguing that their prophecy was connected to the land.[40] His basic opinion remained that prophecy ceased to exist after the exile, due to the geographical detachment from the only unique land upon which providence descended and the prophetic power can be fulfilled.

While Halevi emphasized the uniqueness of the land of Israel both in his poetic and philosophical writings, Maimonides barely related to this issue in his philosophical writings, and barely mentions the theory of climate in his legal writings. The theory of climate appears only in his philosophic and medical writings. The question of the uniqueness of the land, on the one hand, and the theory of climate, on the other, thus appear separately in his writings. This squarely correlates with Maimonides' view that the uniqueness does not stem from the land itself, but the other way around; it is bestowed upon it by the people who accepted to obey the commandments of the *Torah*.

Consequently, although he agreed that the land of Israel is located in the fourth moderate climate, still, he never argues that this condition is unique only to the land and people of Israel, but includes various other lands and nations with sophisticated cultures. As discussed above, in the parable of the king's palace (*Guide* 3: 51), Maimonides distinguishes between the extreme climates in the south and north, in which inferior human groups dwell, and what he calls, in the plural, "in these climates," which means not only the fourth most temperate climate, but also other relatively moderate climates, thus also not only the people of Israel but other nations who have a developed culture and live in an organized society as well.

The phrase he uses: "that are with us in these climates," in the plural and present tense, relates also to Egypt, where Maimonides resided when he wrote the *Guide*. Thus, Egypt, which borders with the land of Israel, is included in the lands which have a moderate climate, and thus produce virtuous people. Moses, the most perfect prophet according to the Jewish tradition, "the master of those who know" in Maimonides' phrasing (*Guide* 1: 54), was born and educated in Egypt. There should have been something positive in the Egyptian environment that enabled this. Even Halevi described the well-being of the Hebrews in Egypt in the times of Moses as follows: "God tended them in Egypt, multiplied and aggrandized them, as a tree with a sound root grows until it produces perfect fruit."[41] In the *Epistle to Yemen*, Maimonides describes the period in which Moses grow up in Egypt as follows: "The air [climate] of Egypt was good at that time, it flourished and its people reached perfection."[42] This view was commonplace; since in Greek culture up to early modern times, Egypt was considered to be a land of ancient knowledge and wisdom.[43] There is a direct cause-and-effect relationship here between the climate and the condition of the people. Still, this did not prevent the natural calamities which God punished the Egyptians with when they refused to let the Hebrews go, since these were not a natural result of climatic conditions, but were miracles, directly caused by divine will.

Jewish law strictly forbade resettling in Egypt. Maimonides, however, lists in his *Book of Judges*, *Laws concerning Kings and Wars*, quite a few flexible exceptions to the rule, which practically emptied it from its content.[44] Thereby he legitimized his own residence there for most of his life. He did argue that it was prohibited to return there because "[. . .] the practices of the Egyptians are more corrupt than those of the inhabitants of all other lands."[45] Still, he could argue that it is located in the most moderate climate, since he did not consider

the climatic factor as deterministic. It is a necessary, but not a sufficient cause for the development of a decent human society.

The same view is found also in Maimonides' discussion of Galen's climatic opinions in his *Medical Aphorisms*. He did agree with Galen that speech abilities are also influenced by climatic conditions. Galen's assertion that only the Greek language was perfect, due to its evolution in the fourth climate, however, was a problem. It excluded Hebrew, the holy tongue, and Arabic, the *lingua franca* of every educated Jew in the Muslim world in this period. Maimonides thus gave Galen's assertion a broader interpretation, by which Greek is only one of the advanced languages, which also include Hebrew and Arabic, the sister languages, all of which evolved in the fourth climate, allowing the cultural superiority of these people:

> [. . .] people living in temperate climates are more perfect in their intelligence and, in general, have more pleasant forms. That is, their shape is more orderly, the composition of their organs is better and their constitution is better proportioned than people living in the far northern or southern climates. So too the pronunciation of letters by people from temperate climates and the movements of their organs of articulation during speech is more even. They are closer to the human language and the enunciation of letters, and the articulation of their speech organs is clearer than that of the people of the distant climates and their language, just as Galen asserted it. Galen did not mean the Greek vernacular alone, but it and similar ones, such as the Greek language, the Hebrew, and Arabic, the Persian and the Aramaic. These are the languages of [people in] temperate climates, and they are natural to them, according to the different places and their proximity [or distance from one another].[46]

Thus, the conclusion is that the moderate climate is not special only to the land of Israel. Maimonides specifically talks of a plurality of moderate climates, in which intelligent people with advanced languages and sophisticated cultures exist. Even the corrupt Egypt is blessed with such climate. We should remember that Arabic, one of the perfect languages in Maimonides' view, was the written and spoken language in Egypt; and this was the language (more specifically Judeo-Arabic) in which Maimonides composed most of his writings, including the voluminous *Commentary on the Mishnah* and *The Guide of the Perplexed*. Thus, the climate is not the essential component for the uniqueness of the land and people of Israel and their language. His philosophical and scientific education was squarely based on Greek and Arabic cultural heritage, thus he could not have degraded their location into lesser climates. While Aristotle and Galen argued that only Greece was located at the temperate climate, thus its superior culture, Maimonides also added Jewish and Muslim cultures. All existed in this climate. The climatic location, thus, is a necessary, but not a sufficient cause for the evolvement of a sophisticated culture, all the more so the unique Jewish culture. The essential cause lies somewhere else.

From the assumption of the necessary connection between the value of the language and culture and the value of the climate, Maimonides logically deduced that if a person who was raised in a temperate climate is transplanted to a lesser climate, his lingual proficiency will deteriorate. The example he introduced is that of the above-mentioned superior languages:

> One should not be deceived by the fact that there are people today from a temperate climate who speak with a very bad enunciation. It is because they immigrated to

> that place from distant lands, just as one finds a Hebrew or Arab in the far north or far south [of the world] who speaks there the language with which he was raised in his homeland.[47]

This is another expression of his pessimistic views concerning the deterioration of human knowledge throughout the ages, which was so typical of the medieval mind. The deterioration of the language is a clear indication of the deterioration of the culture at large. Here, this explanation is directly connected with the theory of climate. Elsewhere (especially *Guide* 1: 71), the deterioration is related to other reasons.[48] Moving from a temperate climatic zone to an extreme zone will necessarily cause the deterioration of human culture, as we have already found above, concerning the human vanity in traveling throughout the zones in order to make money.[49] This was all the more so concerning Jewish immigration to other places, the cold north or hot south. This is the outcome of the exile from the land of Israel, land of the temperate climate. Halevi explained the deterioration of the Hebrew language due to the exile as well, but, unlike Maimonides, he contended that it is the one and only perfect language, bestowed upon the people by divine providence, thus its holiness.[50] Halevi did not connect it here with the theory of climate, but from what he says elsewhere, as we found above, it is clear that he explains this phenomena also by the above theory.

Maimonides thus completely rejected Halevi's assertion that the fulfillment of the intellectual potential of humans at large, and the prophetic potential, of the Jews only, is determined upon climatic causes. In his view, intellectual perfection is mainly the result of the existence of a high potential for physical and moral perfection, which are a necessary by-product of the fulfillment of the Mosaic commandments, and deep commitment to learning. He did agree that climatic circumstances influence human behavior. As mentioned above, he argued that when a person moves from a moderate to an extreme climate, his speech proficiency will deteriorate, and speech is indicative of intellectual capabilities. He did not, however, consider the climatic factor to be the only or main determinant. It is indicative that the theory of climate is not mentioned at all in the chapters of the *Guide* that deal with the conditions for the attainment of intellectual perfection (*Guide* 1: 34; 3: 54 etc.). When reading a given text, one should notice not only what is being said, but also what is absent. This too, has a meaning.

The same goes for the conditions for prophecy. Halevi empathetically argued that prophecy could not exist outside the land of Israel, and made a heroic attempt to explain cases in which biblical prophets did prophesize outside the land, as connected to it. Maimonides, on the other hand, never directly connected prophecy with the climatic factor, since in his view, contrary to Halevi's, it is a necessary consequence of intellectual perfection (as long as God does not activate His veto power). Here too, the climatic factor is not mentioned at all in the long section in the *Guide* dealing with prophecy. The same rationale also appears for the explanation why prophecy ceased to exist. Halevi explained it by the climatic factor, the physical detachment from the land of Israel. Maimonides' explanation is based on a different factor altogether. It is the necessary consequence of the weakening of the imaginary power in the human soul, due to the vicissitudes of Jewish life in exile. Since an active imaginary power is a necessary precondition for prophecy to be activated, its weakness in the circumstances of exile, a period of sorrow and suffering, does not make it possible for prophecy to materialize (*Guide* 2: 32, 36). Maimonides also never introduces the theory of climate as an explanation for the need to live in an organized society, which is unique only to humans (*Guide* 2: 40). Many Jewish scholars after Maimonides, such as Joseph Albo and Simone Luzzatto, did emphasize the climatic cause for human association.[51] Maimonides avoided this connection.

Therefore, the conclusion is that for Halevi the theory of climate was an essential supporting 'scientific proof' for the uniqueness and superiority of the land and the people of Israel. Maimonides, however, although accepting the validity of this theory, systematically avoided using it in this context, as he avoided using it as an explanation for the human need to live in an organized society, unlike so many contemporary scholars. He located the uniqueness of the people somewhere else altogether. It is based for him on the free-will agreement to obey the Mosaic commandments. This is what made them different and better than any other people. The uniqueness of the land was a by-product of the uniqueness of the people who dwell in it.

Late-medieval and early modern traditions

Most late-medieval Jewish scholars, who were active in the Christian-Latin cultural milieu of southern Europe, followed the footsteps of Halevi. They identified only the land of Israel as located in the most temperate fourth climate, and emphasized the influence of its climatic superiority on the uniqueness and superiority of the people of Israel. A typical example can be found in Behyeh ben Asher (Spain, thirteenth–fourteenth centuries):

> The inferior world is divided into seven climates, and the fourth climate is the land of Israel, which is the center of the inhabited land. This is the temperate point, which mixes the cold and the hot more than any other land, because it is at the center of the extremities [. . .]. The land (of Israel) is the (focal) point, and there are three climates (zones) on each side, and it is [situated] in the middle.[52]

This was a typical combination of the Greek theory of climate with the Sages' views. There are numerous examples for the popularity of this opinion.[53] Maimonides' position remained singular.

Only in the seventeenth century, following the great geographic discoveries and the new anthropological conceptions, which undermined the scientific basis of the Greek theory of climate, were Jewish scholars compelled to return to a Maimonidean position—a position which explained the uniqueness of the people and therefore also the land, on the basis of the free-will acceptance of the *Torah* and its commandments.[54] Considering the serious theological implications of such a shift of mind, they were very hesitant. Abraham Farrisol (Italy, early sixteenth century) was clearly cognizant of the fact that there are many human settlements and sophisticated cultures throughout the globe, as he says in his *Iggeret Orhot Olam* (1625). This is the first Hebrew text in which the discovery of America is mentioned, some thirty years after the event:[55]

> The truth is that there is nothing new under the sun. Since ancient times when humans started to multiply, they dispersed and settled either among the seven climatic zones known by us, or down below, in the southern districts, and even further away from the equator in the great islands which are in the sea of India. [. . .] They also discovered the great and wondrous continent in the south-westernmost edge (i.e. America) surrounded in the south by an unknown ocean, almost bigger than our seven zones (put together). All were full of flocks of men, women and infants, blacks and red-skinned, and many animals, and weird, great and wondrous things.[56]

Still, he continued to adhere to the theory of climate as proof for the uniqueness of the land and the people. It is always difficult to cast away a long-standing traditional view. It takes time

to make the mental shift. The same attitude can also be found among contemporary Christian scholars; it was widespread, and stemmed from similar sources.[57]

David Ganz (Prague, seventeenth century) had already wondered about the validity of the Sages' contention concerning Jerusalem's geographic centrality:

> Therefore one should ask why the Sages said that Jerusalem is called the navel of the world, which is its very center. We already know by scientific proof as well as our senses, that Jerusalem is situated in the inhabited world on the forty-sixth degree. [. . .] Even schoolchildren who know only the basic rudiments of the sciences of astronomy and measurement can measure this location. So why did the Sages, who were full of wisdom and knowledge, and knew everything a thousand times more than them, situate Jerusalem at the center of the world; what was their reason?[58]

Another contemporary scholar, the physician Tuviah Ha-Cohen (Italy, seventeenth century), summed it up bluntly: "Every climate which is inhabited can be called temperate,"[59] thereby completely refuting the basic assumptions of the theory of climate. He already knew very well that the earth is inhabited from north to south, the southern hemisphere included. The evidence of the existence of human communities in frozen Greenland and the hot deserts of Libya gave him ample proof. He ridiculed ancient and medieval scholars, such as were discussed throughout this paper, who enthusiastically enlisted the theory of climate in order to prove the superiority of their country and people. Thereby he also practically rejected—only by inference though—the Jewish variation of this claim, as it was championed by Halevi and his many followers. He never even mentions the land of Israel in his discussion—and refutation—of the theory of climate. This omission is striking. Likewise, a later scholar, David Nieto (England, early eighteenth century), listed in the temperate climate: "All of Europe, a big part of Asia and some of Africa,"[60] no less; not only the land of Israel, which is not even specifically mentioned.

These scholars faced a serious problem when the findings of modern science, which became common knowledge, collided with the outdated assumptions of the Sages. How could it be that the greatest Sages, with all their wisdom, were scientifically wrong, and did not apprehend what every little child now knows? This was inconceivable as far as they were concerned, being still traditional Jews. The solution some of these authors adopted was to try and prove that the utterances of the Sages should be read metaphorically, thus salvaging their validity. Azariah de Rossi (Italy, late sixteenth century), assumed in his historiographical *The Light of the Eyes* (*Meor Eynaim*), that already our ancestors knew about the existence of the so-called 'new world,' but this was forgotten with the vicissitudes of time.[61] Thus, when the Sages talked about the centrality of Jerusalem, it did not stem from an erroneous understanding of the geo-climatic facts; they were plenty conscious of the fact that "Jerusalem's location is remote from the real center as we said."[62] What they truly meant was therefore not a physical centrality, but a metaphysical centrality: "Our rabbis said that the Land of Israel is exactly in the middle of the universe when in fact they meant it in a metaphorical manner."[63] The word 'Universe' (Heb. *Olam*) had in their opinion two parallel meanings, a geographic and a metaphorical one.

Geographically, the Land of Israel is not at the center of the whole world, but of a certain part thereof, that is, the northern hemisphere only. Metaphorically, it is not a physical, but rather a metaphysical center; it is the divine operational center of the world. Accordingly, he replaced the traditional organic metaphor of the navel with the metaphor of the heart. Although the heart, unlike the navel, is not located at the physical center of the body, it is

still its operational center, according to classical medical theories.[64] Likewise, Jerusalem is not the navel of the world, but its heart, the center where divine providence is active. The old connection between the theory of climate and the land and people of Israel was finally severed and laid to rest.

Notes

1 The Greeks assumed that human existence is impossible in the southern hemisphere. This for three possible reasons: 1. It is covered with water. 2. According to the climatic theory it is too hot for human life to be sustained. 3. Since they did not know the law of gravity, they assumed that whoever will go south of the equator will practically fall off. See Grafton 1992, p. 57; Craig 2006.

2 On the history of the theory of climate, see Kimble 1968, 151–60, 177–80, Tooley 1953, Fink, 1951. For medieval zonal maps, see Edson 1997, pp. 6–7, 24–5, 67–9, 94–5, 105–7.

3 Hodgen 1971, 281; Tooley 1953, 79–80, n. 106.

4 Translation Kennedy 2013.

5 Herodotus, *History* 1961, 9: 122, p. 301: "Soft lands breed soft men; wondrous fruits of the earth and valiant warriors grow not from the same soil."

6 Machiavelli, *Discourses on Livi,* 1996 1: 1, p. 8: "Because men work either by necessity or by choice, [. . .] it should be considered whether it is better to choose sterile places for the building of cities so that men, constrained to be industrious and less seized by idleness, live more united [. . .]." This is echoed in Renaissance Jewish literature. See Luzzatto 2013, 20: "Experience teaches us that the people of the south lack almost any agility, due to the comfortable and pleasant weather and the fertile land, while the people of the north made themselves a name and honor due the pressure of the difficult weather and hard soil" (my translation).

7 For instance, Philo, *On Providence* 2: 66, *Works*, vol. 9, 503: "Greece must not be accused of being a sour unproductive land. For it too has plenty of deep rich soil, and if the world outside excels in fruitfulness its superiority in foodstuffs is counterbalanced by inferiority in the people to be fed for whose sake the food is produced. For Greece alone can be truly said to produce mankind." See also in Galen, below, n. 28.

8 *The Case of the Animals versus Man before the King of Jinn* 2012, 203: "Praised be God, who preferred us to so many of His creatures, chose us for the most central lands as our home [Iraq], gave us the balmiest air and richest soil, the most plenteous of rivers and trees." See also the medieval Hebrew translation of this epistle: Iben Qualonymos, *Iggeret Ba'alei Ha-Hayyim* (1949, 86–7). This view was adopted also by the Jewish scholar Moses ibn Ezra (Muslim Spain, eleventh century). He agreed with the *Arabiyya* concerning the superiority of the Arabic culture, due to its perfect climatic conditions. This was the basis of his extreme—and unique—position among Jewish scholars that the climate of the land of Israel is too wet to be perfect. He thus contended that Jews who moved from the land of Israel to Arabia culturally flourished due to its better climate. See Ibn Ezra, *Book of Discussions and Deliberations* 1976, 31: "This is why all who exiled to their land, which means Arabia, and multiplied there, their speech was clear, their language pleasant, and their poetry sweet, since they left the wet air of Syria [which included then the land of Israel] and got near the dry air of Hejaz" (my translation). He still believed in the uniqueness of the land of Israel, but based it on a completely different factor, as Maimonides will later do, see below and Kennedy, this volume on *AWP*.

9 Fink 1962, 41; Tooley 1953, 82.

10 Allen 1960, 432; Tooley 1953.

11 Levin 1972, 66–7; Hodgen 1971, 290; Fink 1962, 41. Some even argued that Ireland is the land of moderate climate! See Kimble 1968, 177.

12 Halevi 1962, 80–82; Halevi 1969, 59. Ironically, a paraphrase on this dictum was also used by Jewish scholars in order to praise the climatological values of countries in which they resided. See, for instance, in Shlomo del Medigo (Italy, sixteenth century), who praised his native Candia (in Crete) as a city whose air makes one wise. See Del Medigo, *Sefer Ilem* 1924, 44. Also *Book of Yossifun* 1980, 233: "And they said that Candia is (located) at the navel (*tabur*) of the world" (my translation).

13 Melamed 2012b, 140–74.

14 *Midrash Tanhuma* 1997, 309–10. Also *BT Sanhedrin* 37a: "'Thy navel'—that is Sanhedrin. Why was it called 'navel'?—because it sat at the navel of the world." On the whole issue, see Alexander 1997.

15 Aristotle's *Politics* did not influence them since it was not translated into Arabic, hence also not into Hebrew. See Melamed 2012a, 78–119.
16 For instance, Al Farabi, *The Political Regime*, in *Medieval Political Philosophy: A Sourcebook* 1967, 32–3: "The primary natural causes of the differences between nations in these matters consists of a variety of things. One of them is the difference in the parts of the celestial bodies that face them. [. . .] From this follows the difference between the parts of the earth that are the nations' dwelling-places; [. . .]. From the difference between the parts of the earth follows the difference in the vapors rising from the earth; since each vapor rises from a certain soil, it is akin to that soil. From the difference in the vapors follows the difference in the air and water, inasmuch as the water of every country is generated from its underground vapors, and the air of each country is mixed with the vapors that work their way up to it from the soil." Also Ibn Tufayl 2003, 103–4; Ibn Khaldun, *Muqaddimah* 1958, 93–109.
17 See details in Melamed 1991, 52–78.
18 Halevi, *The Kuzari* 1927, 1: 1. p. 28. I made some slight changes in this translation.
19 On astrological influences in classical and late antique thought, see Gibbons and Komorowska, this volume.
20 For instance *Kuzari* 1: 95, p. 64: " [. . .] the influence of climate, water or soil [. . .] "; 4: 17, p. 224: " [. . .] because this possesses a special power in its air, soil and climate." This was often echoed by later Jewish scholars up to early modern times. See for instance, Shemtov ibn Falaquera (Provence, thirteenth century), *Book of the Seeker* 1976, 71: " [. . .] variations of location and air and water." Yohanan Alemanno (Italy, late fifteenth century), *The Song of Solomon's Ascents*, 1976, vol. 2, 355: "And it is suitable to the air of his land, and its waters and fruits and foods [. . .] ". Shlomo ibn Verga (Spain and Italy, early sixteenth century), *Shevet Yehudah* 1947, 125: "For the changes of the foods and the airs." See also n. 50 below.
21 *Kuzari* 1927, 1: 1, p. 37.
22 See in detail Melamed 2003a, esp. ch. 5.
23 Maimonides, *The Guide of the Perplexed* 1963, 3: 51, vol. 2, pp. 618–19. Concerning Maimonides' attitude towards the blacks, see discussion in Melamed 2003a, ch. 5.
24 Maimonides, *Guide* 1963, 3: 29, ibid. p. 515.
25 It was commonplace in medieval literature to confuse between India and Black Africa. On the attitude towards India in medieval Jewish culture, see Melamed 2006, 299–314.
26 Maimonides, *Introduction to the Commentary on the Mishnah* 1961, 80. My translation. Maimonides' attitude towards moving from one zone to another was negative; see also below, n. 48.
27 *Guide* 1963, 3: 50, 616. Also 1: 31, 67: "Thus you can see that the people of the desert notwithstanding the disorderliness of their life, the lack of pleasure, and the scarcity of food [. . .] ."
28 *Guide*, 3: 46, ibid., p. 578.
29 *The Medical Aphorisms of Moses Maimonides* 1971, 25: 58, vol. 2, 202. Maimonides relates here to Al Farabi's discussion quoted in n. 16 above.
30 Ibid. 25: 56–8, 201–2.
31 See in Melamed 1991.
32 Which does not include blacks, women, and other 'inferior' groups.
33 On Maimonides' radical rejection of astrology, see Langerman 1991.
34 *Kuzari* 1927, 2: 10, 88.
35 Ibid, 2: 12, 88–9. See also 4: 17, 224: "He is also called God of the land, because this possesses a special power in its air, soil and climate, which in connection with the tilling of the ground, assists in improving the species."
36 Ibid. 1: 95, 65. This view already appeared in the *Book of Jubilees* 1902, 8: 29–30, pp. 74–5: "This is the land which came forth for Japheth [. . .] But it is cold, and the land of Ham is hot, and the land of Shem is neither hot nor cold, but it is of blended cold and heat."
37 See details in Melamed 2003.
38 Also *Kuzari* 1927, 1: 63, p. 53.
39 Ibid. 2: 18–20.
40 Ibid. 2: 13–14.
41 Ibid. 1: 95, p. 66.
42 Maimonides, *Epistles* 1987, vol. 1, 145, my translation.
43 Iverson 1993; On the myth of Egypt in Jewish sources, see: Melamed 2010, in numerous places, the index, 532, with extended bibliography.

44 Maimonides, *Mishneh Torah*, *Judges* 5: 7–12.
45 Ibid. 5: 8. *The Code of Maimonides*, book 14, *The Book of Judges*, 1963, 218.
46 Maimonides, *Medical Aphorisms* 1971, 25, 58, p. 202. This opinion is found also in the writings of his younger contemporary, Ibn Rushed. See *Averroes on Plato's Republic* 1974, 13: "This opinion would only be correct if there were but one class of humans disposed to the human perfection and especially to the theoretical ones. It seems that this is the opinion that Plato holds of the Greeks. However, even if we accept that they are the most disposed by nature to receive wisdom, we cannot disregard [the fact] that individuals like these—i.e., those disposed to wisdom—are frequently to be found. You find this in the land of the Greeks and its vicinity, such as the land of ours, namely Andalus, and Syria and Iraq and Egypt, albeit this existed more frequently in the land of the Greeks." Ibn Rushed did not mention the Jews, who are Maimonides' main concern here.
47 Ibid. 203. I amended the translation somewhat. In other places, Maimonides explained the deterioration of the Hebrew language on different grounds, such as the influence of the languages of the people among whom they resided. See *Hilchot Tefillah*, 1: 4. On the same phenomena in the medieval Christian environment, see Hodgen 1971, ch. 7.
48 See in detail, Melamed 2003, ch. 3.
49 See n. 25 above and discussion there. See also in David Kimhi's (Provence, fourteenth century) *Commentary on Psalms* 48: 3: "Every person who moves from one climate to another will become sick due to the changes in the air, definitely if he moves from the (perfect) air of the land of Israel." Some medieval scholars, however, considered moving among the zones positively, for medical reasons and scientific research. See for instance, the explanation Sa'adia Gaon (Baghdad, tenth century) gave to the fact that the fathers of the Hebrew nation constantly travelled: "The stories concerning the travels of Abraham, Jacob and Moses, who went from place to place, for various reasons, were told for our benefit, so a person would not stay put in the land in which he was born, despite the circumstances, but might replace it with another country considering the changing accidents. [. . .] and the greatest among the physicians advise those with a hot and dry constitution to move out of a dry and hot land, like Hejaz, to a cold and wet land, such as the Slavic lands [. . .] another benefit of travel and wondering is to investigate the nature of the animals, and learn the land, the constellations, and the distance of the stars from the earth" Sa'adia Gaon 1984, 179, 434 (My translation).
50 *Kuzari* 1927, 2: 68. Ibid., p. 124.
51 Albo 1946, 1: 25, vol. 1, 196: "The differences in character and disposition are also due to difference in habitat. Different lands differ in respect to air, mountains, waters, and so on." For Luzzatto, see n. 6 above.
52 Behyiah ben Asher 1970, 137. See also Moses Botril (Spain, fourteenth century) Botril 1884, 102–4: "The scholars of measurements divided the inhabited land into seven climates; in every climate the air changes. And the land of Israel is (located in) the best climate. And Jerusalem is in the fourth climate, and about her it is said: 'Beautiful in its loftiness, the joy of the whole earth' (Ps. 48: 2)" (My translation).
53 See details and many more examples in Melamed 1991.
54 See in detail in Melamed 1998, 42–53.
55 Melamed 1996, 443–64.
56 Farrisol, *Igeret Orhot Olam* 1793, 12b. My translation.
57 For a similar attitude in contemporary European thought at large, see Grafton 1992; Craig 2006.
58 Ganz, *Nehmad ve-Naim* 1743, 33. My translation.
59 Ha-Cohen, *Sefer Ma'ashe Tuviah* 1968, 62a. My translation. The whole discussion of the theory of climate appears on 61a–63a.
60 Nieto, *Ha-kuzari Ha-Sheni* 1948, 152. My translation. The whole discussion of the theory of climate appears on 152–4.
61 See in Melamed, 2003, 232–8.
62 de' Rossi, *The Light of the Eyes* 2001, 223.
63 Ibid., 232.
64 See in Melamed 2012b, 140–74.

Bibliography

Albo, Joseph. 1946. *Book of Principles, Hebrew text with translation by I. Husik.* Philadelphia, PA: The Jewish Publication Society of America.

Alemanno, Yohanan. 1976. *The Song of Solomon's Ascents*, edited by A. Lesley. PhD Dissertation, Berkeley: University of California (Hebrew).
Alexander, Philip. 1997. "Jerusalem as the *Omphalos* of the World: On the History of a Geographical Concept." *Judaism* 46: 147–58.
Allen, John. 1960. *A History of Political Thought in the Sixteenth Century*. London: Methuen.
Aristotle. 1962. *The Politics*, edited and translated by E. Barker. New York: Oxford University Press.
Ben Asher, Behyiah. 1970. *Commentary on the Torah*, edited by H. Shevel. Jerusalem: Ha-Rav Kook Institute (Hebrew).
Book of Jubilees 1902. Translated and edited by R.H. Charles. London: Adam and Charles Black.
Book of Yossifun 1980. Edited by D. Flusser. Jerusalem: Bialik Institute (Hebrew).
Botril, Moses. 1860. *Commentary on Sefer Yezirah*. Lemberg: Drukerei des Stauropigianischen Institut (Hebrew).
The Case of the Animals Versus Man Before the King of Jinn 2012. Translated by L.E. Goodman and R. McGregor. Oxford: Oxford University Press.
Craig, Martin. 2006. "Experience of the New World and Aristotelian Revisions of the Earth's Climates during the Renaissance." *History of Meteorology* 3: 1–15.
De' Rossi, Azariah. 2001. *The Light of the Eyes*, translated with an introduction and notes by J. Weinberg. New Haven, CT and London: Yale University Press.
Del Medigo, Shlomo. 1924. *Sefer Ilem*. Odessa: Greenspan and Beilinson (Hebrew).
Edson, Evelyn. 1997. *Mapping Time and Space: How Medieval Mapmakers Viewed the World*. London: The British Museum.
Farrisol, Abraham. 1793. *Iggeret Orhot Olam*. Prague (Hebrew).
Fink, Zera. 1951. "Milton and the Theory of Climate Influences." *Modern Language Quarterly* 2: 67–80.
——. 1962. *The Classical Republican: An Essay in the Recovery of a Pattern of Thought in Seventeenth Century England*. Evanston, IL: North-Western University Press.
Ganz, David. 1743. *Nehmad ve-Naim*. Yesenitz (Hebrew).
Grafton, Anthony. 1992. *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery*. Cambridge, MA: Harvard University Press.
Ha-Cohen, Tuviah. 1976. *Sefer Ma'ashe Tuviah*. Jerusalem: Blotnik (Hebrew).
Halevi, Elimelech. 1962. *The World of the Aggadah*. Tel Aviv: Dvir (Hebrew).
——. 1969. *Values of the Aggadah and Halakah in the Light of Greek and Latin Sources*. Tel Aviv: Dvir (Hebrew).
Halevi, Judah. 1927. *The Kuzari*, translated with an introduction by H. Hirshfeld. New York: Shocken Press.
Herodotus. 1961. *History*, translated by A.D. Godley. Cambridge, MA: Harvard University Press.
Hodgen, Margaret. 1971. *Early Anthropology in the Sixteenth and Seventeenth Centuries*. Philadelphia: University of Pennsylvania Press.
Ibn Ezra, Moses. 1976. *Book of Discussions and Deliberations*, edited and translated by A.S. Halkin. Jerusalem: Mekizei Nirdamim (Hebrew).
Ibn Falaquera, Shemtov. 1976. *Book of the Seeker*, translated by H. Levine. New York: Yeshiva University Press.
Ibn Khaldun. 1958. *Muqaddimah*, translated by F. Rosenthal. New York and London: Routledge.
Ibn Rushed. 1974. *Averroes' On Plato's 'Republic'*, translated with an introduction by R. Lerner. Ithaca, NY and London: Cornell University Press.
Ibn Tufayl. 2003. *Hayy Ibn Yaqzan*, translated by L.E. Goodman. Chicago, IL: University of Chicago Press.
Ibn Verga, Shlomo. 1947. *Shevet Yehudah*. Jerusalem: Bialik Institute (Hebrew).
Iben Qualonymos, Qualonymos. 1949. *Iggeret Ba'alei ha-Hayyim*. Edited by I. Tuporowsky. Jerusalem: Ha-Rav Kook Institute (Hebrew).
Iverson, Erik. 1993. *The Myth of Egypt and the Hieroglyphs in European Tradition*. Princeton, NJ: Princeton University Press.
Kimble, George. 1968. *Geography in the Middle Ages*. New York: Russell and Russell.
Langerman, Zvi. 1991. "Maimonides' Refutation of Astrology." *Maimonidean Studies* 2: 123–53.
Lerner, Ralph, and Muhsin Mahdi. 1963. *Medieval political philosophy: A sourcebook.* New York: Free Press of Glencoe.
Levin, Harry. 1972. *The Myth of the Golden Age in the Renaissance*. New York: Oxford University Press.
Luzzatto, Simone. 2013. "Discorso." *Scritti politici e filosofici di un ebreo scettico nella Venezia del seicento*, a cura di G. Veltri. Milano: Bompiani.

Machiavelli, Niccolo. 1996. *Discourses on Livi*, translated by H. Mansfield and N. Tracov. Chicago, IL and London: Chicago University Press.
Maimonides, Moses. 1961. *Introductions to the Commentary on the Mishnah*, edited by M.D. Rabinovitz. Jerusalem: Ha-Rav Kuk Institute (Hebrew).
——. 1963. *The Guide of the Perplexed*, translated by Sh. Pines. Chicago, IL: Chicago University Press.
——. 1971. *The Medical Aphorisms,* edited and translated by F. Rosner and S. Muntner. New York: Yeshiva University Press.
——. 1987. *Epistles of Maimonides*, edited and translated by I. Shilat. Vol. 1. Jerusalem: Ma'aliot (Hebrew).
——. 1955. *The Code of Maimonides*, book 14, translated by A.M. Hershman. New Haven, CT: Yale University Press.
Melamed, Abraham. 1991. "The Land of Israel and the Theory of Climate in Medieval Jewish Thought," in, *The Land of Israel in Medieval Jewish Thought,* edited by M. Halamish and A. Ravitzky, 52–78. Jerusalem: Yad ben Zvi (Hebrew).
——. 1996. "The Discovery of America in Sixteenth and Seventeenth Centuries Jewish Thought," in *Following Columbus: America 1492–1992*, edited by M. Eliav Feldon, 443–84. Jerusalem: Zalman Shazar Institute (Hebrew).
——. 1998. "From the Navel to the Heart: The Land of Israel and the Climate Theory in Early Modern Jewish Thought." In *The Land of Israel in Jewish Thought in Modern Times*, edited by A. Ravitzky, 42–53. Jerusalem: Yad ben Zvi (Hebrew).
——. 2003a. *The Black in Jewish Culture: A History of the Other*. London: Routledge and Curzon.
——. 2003b. *On the Shoulders of Giants: The Debate between Moderns and Ancients in Medieval and Early Modern Jewish Thought*. Ramat Gan: Bar Ilan University Press (Hebrew).
——. 2006. "The Image of India in Medieval Jewish Culture: Between Adoration and Rejection." *Jewish History* 20: 299–314.
——. 2010. *The Myth of the Jewish Sources of Science and Philosophy*. Jerusalem: Magness Press (Hebrew).
——. 2012a. "Aristotle's *Politics* in Medieval and Renaissance Jewish Political Thought." In *Wisdom's Little Sister: Studies in Medieval and Renaissance Jewish Political Thought,* edited by Abraham Melamed, 78–119. Boston. MA: Academic Studies Press.
——. 2012b. "The Organic Theory of the State in Medieval and Renaissance Jewish Political Thought." In *Wisdom's Little Sister: Studies in Medieval and Renaissance Jewish Political Thought,* edited by Abraham Melamed, 140–74. Boston, MA: Academic Studies Press.
Midrash Tanhumah 1997. Translated by J.T. Townsend. Hoboken, NJ: Ktav.
Nieto, David. 1958. *Ha-Kuzari ha-Hadash*, edited by C. Roth. Jerusalem: Ha-Rav Kook Institute (Hebrew).
Philo of Alexandria. 1960. *Works*, vol. 9, edited by F.H. Colson. Cambridge, MA: Harvard University Press.
Sa'adia Gaon. 1984. *Commentary on Genesis*, edited by M. Zucker. New York: Jewish Theological Seminary Press (Hebrew).
Tooley, Marian. 1953. "Bodin and the Medieval Theory of Climate." *Speculum* 28: 64–83.

PART II

Determined and determining ethnicity

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8

COLONISATION, *NOSTOS* AND THE FOREIGN ENVIRONMENT IN XENOPHON'S *ANABASIS*

Rosie Harman

The representation of the foreign landscape and environment plays a large part in the experience of Asia offered to the reader of Xenophon's *Anabasis*. We are given sensual and evocative descriptions of fertile plains lush with unusual and delicious game and enormous, exotic fruit; but we also accompany the Greeks as they struggle over harsh and forbidding mountain ranges, through ice and snow, beset by enemies. The text's admiring descriptions of fecundity and abundance have been read as indicative of an ethnographic gaze which figures the Greeks as discoverers and exploiters of rich foreign resources, and so ideologically constitutes Greek identity through opposition to the exotic and consumable world they survey.[1] In contrast, the frequent depictions of the hopelessness of the Greeks lost in a hostile and unfamiliar land from which they are desperate to escape have been read as indicating a concern with a loss of self and the dislocation of Greek identity in the fourth century BCE.[2] Both sets of experiences co-exist in the text: the Greeks are a marauding army who loot and destroy, but they also suffer great deprivation, hardship, and uncertainty on their journey. As I argue, the contradictions involved in the Greek relation to the foreign environment mark, and produce, contradictions in Greek self-consciousness.

I explore two concepts of the environment at work in the *Anabasis*: the experience of the Asian landscape as a series of obstacles which must be overcome in order to accomplish a successful return to Greece, and the experience of Asia as a land of plenty which provides rich resources to plunder and territory to colonise.[3] These models of the foreign environment can be related in complex and often contradictory ways, I suggest, to two possible story arcs which seem to be at play simultaneously in the text. As has often been noted, this text takes an unusual form, and is difficult to pin down in terms of pre-existing prose genres. No explanatory introduction is provided, and since the text opens with the Persian royal house and the story of Cyrus' attempt on the throne, our initial expectation is that this will be a story about Cyrus; yet he is dead, his attempt on the throne a failure, by the end of book 1. We are then left struggling, like the Greeks themselves, to understand where the text is taking us, what sort of story this is going to be.[4] Comparisons to the journey of Odysseus (3.2.25, 5.1.2), as well as the Greeks' own statements about the need to return home to Greece, seem to situate this as a *nostos* narrative,[5] yet the possibility that the Greeks might found a city—that this is a foundation narrative[6]—is also repeatedly raised.

Both narrative models, the return to Greece and colonisation, could potentially imagine the Greek experience figured in the story of the 10,000 as self-affirmatory—a story of Greek empowerment and triumph over the foreign. Yet, neither possibility is realised. Although the claim that the Greeks' ultimate goal is a return "home" is frequently made, no such return to Greece is described in the text, and the text ends with the Greeks splitting up, some drifting away, some once again taking up as mercenaries in Ionia, as at the text's opening.[7] And similarly, although the possibility that the 10,000 might settle in Asia is repeatedly raised, this also is never achieved. This lack of resolution of expectations leaves the reader unsure what to make of the narrative: what sort of story are we left with? And what does that mean politically, as a narrative about the Greek experience in a foreign land?

The two sets of narrative expectations stand in clear contradiction to one another: return home and settlement abroad are mutually exclusive options. There is a tension between these two possibilities,[8] and between the contradictory ways of responding to the environment that, I will suggest, herald or tell against these possibilities, throughout the text.[9] As we shall see, as well as suggesting self-affirmation, discussions of each possibility—return and colonisation—are also inflected with concern regarding whether and how they might be achieved and what their implications might be for the Greek sense of self. Similarly, each model of response to the environment is shown to be problematic and a cause for anxiety, which the 10,000 Greeks attempt to overcome but from which they can never entirely escape.

Greeks abroad

Before I move on to look at how the environment is presented, it is useful to examine the speech given by Xenophon's character at the point where he takes over leadership of the army following the murder of the generals, and the return march (*katabasis*) begins.[10] He encourages the army not to be despondent about the difficulties of their situation—the numbers of their Persian enemy, the defection of Ariaeus, or their lack of cavalry or guide. Regarding their lack of provisions, he claims they can "appropriate them, if we are victorious" (3.2.21), and regarding the obstacle posed by the rivers in their way, he suggests they can simply cross them where they become fordable nearer their sources (3.2.22). However, he advises that "even if the rivers will not afford us a crossing and we shall find no-one to guide us, even in that case we ought not to be despondent (*athumēteon*)" (3.2.23):

> For we know that the Mysians, whom we should not admit to be better men than ourselves, inhabit many large and prosperous cities in the King's territory, we know that the same is true of the Pisidians, and as for the Lycaonians we even saw with our own eyes that they had seized the strongholds in the plains and were reaping for themselves the lands of these Persians; so, in our case, my own view would be that we ought not yet let it be seen that we have set out for home; we ought, rather, to be making our arrangements as if we intended to settle here (*hōs autou oikēsontas*). For I know that to the Mysians the King would not only give plenty of guides, but plenty of hostages, to guarantee a safe conduct for them out of his country; in fact, he would build a road for them, even if they wanted to take their departure in four-horse chariots. And I know that he would be thrice glad to do the same for us, if he saw that we were preparing to stay here.[11]

This is a very strange passage. The fear of being trapped by impassable rivers is resolved by the statement that others have inhabited the land, are reaping the plains and have established

prosperous cities. The land is transformed from a place of entrapment and danger to a potentially fertile and prosperous home. However, Xenophon raises this possibility only in order to suggest that they *pretend* to want to settle there as a strategy for being able to leave the sooner. In the next stage of his speech, he seems to revert to considering settlement, but now he expresses concern that this too carries dangers (3.2.25):

> I really fear, however, that if we once learn to live in idleness and luxury (*argoi zēn kai en aphthonois bioteuein*), and to consort with the tall and beautiful women and maidens of these Medes and Persians, we may, like the Lotus Eaters, forget our homeward way (*epilathōmetha tēs oikade hodou*).

Now the Greeks seem to be threatened not by a landscape of obstacles and entrapment, but by an environment of luxury and erotic pleasure, where, like the Lotus Eaters, they are figured as consumers of exotic delights: the allure and attraction of the place is now the danger that the Greeks face, not the impassability of obstacles. As John Dillery has noted, "There is a suggestion here that the Greeks will in some way lose their identity, that in losing their desire to return home they will lose their 'Greekness.'"[12] In a final step, Xenophon again urges a return to Greece, but with a curious twist (3.2.26):

> Therefore, I think it is right and proper that our first endeavour should be to return to our kindred (*oikeious*) in Greece, and to point out (*epideixai*) to the Greeks that it is by their own choice that they are poor; for they could bring here the people who are now living a hard life at home (*oikoi*), and could see them in the enjoyment of riches.

The army's ideological point of reference should be Greece (figured as "home"), and the comforting, self-fulfilling notion of return. Yet the purpose of return is to point out/display (*epideixai*) to the Greeks that they could see the poor become rich by bringing them here. It is not clear how the putative returnees of the 10,000 would be "pointing this out." The visual vocabulary of display might suggest that they will return to Greece rich, although in the following paragraph Xenophon urges that they should dump all non-essential baggage and burn tents and wagons, carrying only what is needed for fighting and for eating and drinking. Yet this austere message, suggesting the dire straits in which they find themselves, is immediately softened by Xenophon's added comment that "when men are conquered, you are aware that all their possessions become the property of others; but if we are victorious, we may regard the enemy as our packbearers" (3.2.28), suggesting that they may be able to acquire wealth after all.[13] Elsewhere, we are told that taking profit back home to their families was the aim of many of them in setting out ("some had abandoned mothers and fathers, or had left children behind with the idea of getting money to bring back to them", 6.4.8). Indeed, a connection is made between plunder and return home: "By this time, since it seemed that they were getting near Greece, the question came into their minds more than before how they might reach home with a little something in hand (*exontes ti oikade aphikōntai*)" (6.1.17).

The journey of the 10,000 seems to wobble conceptually between a narrative of escape under desperate circumstances, and an expedition aimed at acquisition.[14] The image of Asia as a land of sensual enjoyment seems to be offered as a way of mitigating the disempowerment of the 10,000, by figuring them as potential exploiters rather than as desperate escapees.[15] Yet this image poses its own threat—a loss of essential Greekness. The speech wants to have its cake and eat it too: to combine images of Greeks as empowered appropriators and consumers of the foreign, *and* as rejecting the moral inferiority implied by the use and consumption of

the foreign (note the value-laden language of idleness and luxury: *argoi zēn kai en aphthonois bioteuein*, 3.2.25). When an attempt is made to diffuse the problems posed by the enjoyment of foreign plenty by hinting that they could take wealth home, thus incorporating it into a narrative of return, this line of reasoning too twists back on itself: we are told that they will show Greeks at home that they are better off here. The idea of Asia as a land of plenty seems simultaneously to evoke the possibility of successful (because wealthy) return home, *and* the possibility of settlement abroad. An argument for the one bleeds into a suggestion of the other, despite settlement's problematic connotations; the self-affirming desire that foreign bounty arouses seems difficult to contain within ideologically acceptable limits.[16] The speech's logical contortions attempt to smooth over the essential contradictions between these different positions; but they also expose the tensions and anxieties in Greek self-conception in relation to foreign lands.[17]

The speech's contradictions can also perhaps be related to contradictions in contemporary Greek ideas about the environment: the idea of the desire for or enjoyment of material comfort becoming a threat to identity is a key theme in Herodotus and early ethnographic and geographical writing. The evocation of Asia as a land of luxury which might have an enervating effect on its inhabitants is reminiscent of *Airs, Waters Places*, Part 12 which imagines Asia as having a mild, temperate climate brought about by its position in the middle of the world between the extremes of north and south.[18] This leads to great fertility and abundance, with vegetation, animals and human inhabitants all growing to greater beauty and size than elsewhere—as with Xenophon's image of beautiful women, the people are beautiful in appearance and very tall. However, "Courage, endurance, industry and high spirit could not arise in such conditions either among the natives or among immigrants . . . but pleasure must be supreme."[19] Similarly, Herodotus imagines a link between fertile, productive land and military weakness: in his closing chapter, Cyrus the Great rejects the idea that the Persians should emigrate from their harsh, rugged land to the rich, fertile plains recently won by the Persian Empire, objecting that "soft lands tend to breed soft men" (Hdt. 9.122).[20] Here, as so often in Herodotus' depiction of the powerful (most obviously in Xerxes' attempt to invade Greece), we are shown that the desire for more can lead to a people's undoing.

Interestingly, however, alternative ideas about the effects of an ideal climate or flourishing land seem to have been around in Xenophon's day. As Romm has shown, in Plato and Aristotle, it is not Asia but Greece that occupies the ideal temperate zone at the centre of the earth, and, far from having negative consequences, this is used to explain her political and military excellence.[21] We can compare Xenophon's *Poroi*, which praises Athens' good fortune in lying at the mild, temperate centre of the *oikoumenē*, away from extremes of heat and cold (*Poroi* 1.6), and in occupying fertile land with flourishing crops (*Poroi* 1.3).

Although the *Anabasis* does not generally discuss the climate, the idea that Asia contains the earth's central temperate zone, midway between the extremes of heat and cold, is perhaps implied in Cyrus' speech which rhetorically figures the Persian Empire as encompassing the entire *oikoumenē*: the empire extends "toward the south to a region where men cannot dwell by reason of the heat, and to the north to a region where they cannot dwell by reason of the cold" (1.7.6)—which would presumably put the ideal, mild zone somewhere at its centre. In any case, as we shall see, the text frequently presents Asia as full of fertile crops and rich resources. Yet the potential effects of a flourishing land on those who might be tempted to reap its benefits are not clear. Cyrus' description of the Persian Empire also presents an image of Asia as a place of great environmental variation; we can compare *Airs Waters Places* 16, which stresses the variety of conditions in Asia. This might prepare the reader for a range of experiences.

The different images of the foreign environment mentioned in Xenophon's speech—impassable rivers or rich plains and sensual enjoyment—recur throughout the text, and feed into, I suggest, the ideological tensions discussed above. Yet, as I will show, each of these images also contains its own ambiguities and contradictions.

Obstacles and entrapment

The foreign landscape is frequently described as a place of entrapment. As Rood has shown, the text makes frequent use of the language of *aporia* (and other terms based on the root *poros*) to describe the state of uncertainty, pathlessness, or lack of resources that the 10,000 often find themselves in.[22] When the 10,000 find themselves trapped between the Tigris and the Carduchian Mountains, we are told, "Here there was great uncertainty (*aporia*). For on one side of them were exceedingly high mountains and on the other a river so deep that not even their spears reached above water when they tried its depth" (3.5.7). Similarly, as they approach the borderlands of Armenia, "Then great despondency (*athumia*) fell upon the Greeks as they saw a river difficult to cross (*dusporian*), as they saw troops ahead who would obstruct their crossing, and as they saw the Carduchians behind them, ready to attack them if they tried to cross" (4.3.7).[23]

Although other obstacles are mentioned, there seems to be a particular concern with the crossing of rivers: Dexippus as good as condemned his fellow soldiers to death by cheating them of the chance of transport by sea, we are told, since he heard "that it was impossible (*aporon*), returning by land, to cross the rivers and reach Greece in safety" (6.6.23). Hesiod describes the need for reverence for rivers, saying that the gods will punish those who cross rivers without purifying themselves (*Op.* 737–41), a concern that might be linked to the worship of river gods.[24] Perhaps more pertinently, in early Greek geographical thought, rivers are imagined as significant boundaries. Herodotus tells us that the rivers Nile, Phasis and Tanais were considered boundaries between the continents (Hdt. 4.45).[25] Boundary crossing is a matter of deep concern: Xerxes' bridging of the Hellespont, the boundary between Asia and Europe, for example, is presented in Herodotus (7.34–5) and Aeschylus (*Pers.* 745–51) as an act of *hubris* which will receive punishment from the gods. The *Anabasis*'s repeated concern with whether the Greeks will or will not be able to cross rivers and other natural obstacles might indicate an anxiety about the potentially transgressive nature of their travels, as they press onwards through territory where they do not perhaps, as Greeks, belong.[26]

Yet despite their frequent uncertainty and despondency when faced with such obstacles, the 10,000 do eventually manage to cross them.[27] This overcoming of difficulties can become an affirmation of Greek superiority through the ideological language of "victory". When faced with an apparently impassable ravine, Xenophon claims: "It is to the enemy that I should myself wish to have all roads seem easy (*eupora*)—for their retreat; as for ourselves, we ought to learn from the very ground (*apo tou chōriou*) before us that there is no safety for us except in victory (*mē nikōsi*)" (6.5.18). Similarly, in a manipulative speech in which he attempts to play on their shared Greekness, Hecatonymus of Sinope claims both to applaud the 10,000 as Greeks who stand victors over barbarians (*nikate Hellēnes ontes barbarous*, 5.5.8), and to congratulate them "that you have made your way through many dreadful troubles, as we hear, in safety to this place" (5.5.8). Successful accomplishment of their difficult journey is claimed as a sign of successful Greekness through its construction via opposition to the non-Greek. Here any potentially disturbing connotations of boundary crossing seem to be pushed aside in favour of promoting the Greeks' dynamism as adventurers who triumph over the lands they pass through.

Just as the successful overcoming of obstacles is imagined as a sign of Greek victory, the claim that they will fail to overcome obstacles is used by enemies in order to get the 10,000 to

submit to their control or to manipulate their path.[28] After Cunaxa, Phalinus tells the 10,000 that the King "believes that you are his because he has you in the middle of his country, enclosed by impassable rivers (*potamōn . . . adiabatōn*)" (2.1.11). Tissaphernes attempts to impress upon Clearchus the vulnerability of his position (and so his need to submit to Persian control) by inviting him to view the hostile landscape which surrounds him: "Do you not behold these vast plains, which even now, when they are friendly, you cross (*diaporeuesthe*) only with great toil; and also these great mountains you have to pass (*poreutea*), which we can occupy in advance and make impassable (*apora*)?" (2.5.18). Hecatonymus of Sinope stresses the difficult landscape which faces the 10,000 should they attempt to continue their journey by land—the impassable mountain peaks (5.6.7), plains full of cavalry (5.6.8), and rivers difficult to cross (5.6.9)—with the aim of getting the 10,000 to go by sea and so to leave Sinopean territory untouched. The manipulation of the 10,000's responses to the environment can take place not just through speech, but through manipulating the physical environment itself. When "they kept coming upon trenches and canals, full of water, which could not be crossed without bridges" (2.3.10), Clearchus "suspected that the King had let the water into the plain in order that several obstacles in the way of their journey should appear to exist for the Greeks (*polla ta apora phainoito tois Hellēsi einai eis tēn poreian*)" (2.3.13).[29]

In the sequence of speeches following the murder of the generals, the problem of how to respond to the environment they face—of whether or not the difficulties that face them can be overcome—becomes involved in defining Greek identity. In the immediate aftermath of the murders, "the Greeks were in a state of great uncertainty (*aporia*)" (3.1.2), reflecting that "they were distant from Greece not less than ten thousand stadia, that they had no guide to show them the way, that they were cut off by impassable rivers (*potamoi . . . adiabatoi*) which flowed across the homeward route (*oikade hodou*) . . . " (3.1.2). In order to overcome their *aporia*, Xenophon makes a speech re-imagining their situation—stranded in a foreign land with open war declared against them—as a positive, rather than disastrous, development, by reframing the environment about them as an environment of riches there for the taking. He declares that previously, "I saw plainly what a great amount of fine land they possessed, what an abundance (*aphthona*) of provisions, what quantities of servants, cattle, gold and apparel; but whenever I took thought of the situation of our own soldiers, I saw that we had no share in these good things, except if we bought them" (3.1.19–20). Now that the truce has broken down, he says, the Greeks are free to plunder. This opportunity is framed in ideological terms: "For now all these good things are offered as prizes for whichever of the two parties shall prove to be the better men" (3.1.21). And, claims Xenophon, they themselves are better: "We have bodies more capable than theirs of bearing cold and heat and toil" (3.1.23). The perception of the land as full of abundance and luxuries seems to go hand in hand with the perception of the softness of the inhabitants: we can compare Herodotus on Cyrus the Great's claim that soft lands breed soft men (Hdt. 9.122) and *Airs, Waters Places* 12 on the connection between a wealthy, fertile environment in Asia and a lack of fighting spirit in Asian men, discussed above. Just as the environment is reframed as not threatening but inviting, the enemy are re-imagined as men not to be feared. Yet despite this encouraging message, the reader might also be unsettled by the suggestion of Greek desire for foreign wealth, through the hinted danger of its enervating power.

This highly ideological language continues in the confrontation between Xenophon and Apollonides. Apollonides rejects Xenophon's suggestions: "This man maintained that anyone who said he could gain safety in any other way than by winning the King's consent through persuasion, if possible, was talking nonsense; and at the same time he began to recite the difficulties (*aporias*) of their situation" (3.1.26). Xenophon responds by accusing

him of perceiving things wrongly: "You amazing fellow, you have eyes but still do not perceive, and you have ears but still do not remember" (3.1.27). He links this failure of perception to a failure of Greekness: "For the fellow is a disgrace both to his native state and to the whole of Greece, since, being a Greek, he is still a man of this kind" (3.1.30). This claim of failure is taken to its logical extreme as it is noticed that Apollonides has pierced ears like a Lydian, and so is declared not to be Greek and driven away. Here the perception and declaration of difficulties—or at least difficulties which would prevent the army from pursuing their return home—is framed in terms of a loss of Greek identity. The text's concern with the traversing of obstacles suggests tensions in Greek thought about the nature of Greek travel abroad. Through the suggestion of obstacles in the way, Greek travel can be conceived as a dangerous and potentially transgressive act, and the failure to overcome difficulties can be imagined as equivalent to defeat by an enemy or even as leading to the unravelling of Greek identity. Yet Greek identity can also be bolstered through the re-imagination of the foreign landscape as a place to be traversed and plundered at will, although this too might offer its own dangers.

Abundance

Co-existing with the experience of an environment of obstacles, the text contains descriptions of the fecundity of landscapes that focus on what can be consumed. In Cilicia, for example, the Greeks discover "a large and beautiful plain, well-watered and full of trees of all sorts and vines; it produces an abundance of sesame, millet, panic, wheat, and barley, and it is surrounded on every side, from sea to sea, by a lofty and formidable range of mountains" (1.2.22). The description of the plain in terms not only of foods produced but natural resources and defences might hint at an implicit consideration of the land's colonial potential, even though this occurs early in the text when the army is still on the inland march led by Cyrus and settlement is not a consideration.[30] Such descriptions position the Greeks as potential exploiters of foreign lands, forming a backdrop to their violence as a marauding army who loot and burn as they go.[31] Indeed, sometimes the representation of Greek consumption of foreign goods suggests a leisurely enjoyment of plundered riches. However, such scenes can be complex. Greek consumption of the foreign can also be presented as the desperate last resort of near-starving men: the 10,000 are sometimes left entirely without provisions, having to eat their pack animals to survive, and their appropriation of local goods is often driven by pure need. Further, the consumption of looted goods can provide unexpected experiences, or elicit unusual, un-Greek behaviour from the soldiers: as mentioned above, there seems to be some equivocation in fifth- and fourth-century Greek thought regarding the effects of a flourishing, fertile land on those who experience it. While in many cases the language of strangeness can mark the Greeks' empowered distance from the peoples whose goods they steal, some experiences of the foreign can be disturbing. Such moments hint at anxieties about the effects of desire for and enjoyment of foreign wealth.

The Arabian plain is described in terms of its wild game. There are "wild animals of all sorts, vast numbers of wild asses and many ostriches, besides bustards and gazelles" (1.5.2). We are informed how these could best be hunted and what they tasted like: for the asses, "the flesh of those that were captured was like venison, but more tender" (1.5.2), while for the bustards, "their flesh was delicious" (1.5.3). An attempt is made to fit these foods into a framework of familiar Greek experience—asses taste like venison; trapping bustards is like trapping partridges ("they fly only a short distance, like partridges, and soon tire", 1.5.3). Yet the oddity of these experiences is also stressed at (1.5.2):

> As for the asses, whenever one chased them, they would run on ahead and stop—for they ran much faster than the horses—and then, when the horses came near, they would do the same thing again, and it was impossible to catch them unless the horsemen posted themselves at intervals and hunted them in relays.

The ostrich was impossible for a hunter to catch, "for it would distance him at once in its flight, not merely plying its feet, but hoisting its wings and using them like a sail" (1.5.3). It is an exotic, and alien, environment: "In this region the ground was an unbroken plain, as level as the sea, and full of wormwood; and whatever else there was on the plain by way of shrub or reed, was always fragrant, like spices; trees there were none" (1.5.1–2). The land is viewed in terms of consumption, yet the processes involved in that consumption are strange, and require an adjustment in expectations about how the world is to be experienced.

Similarly, in villages in Babylonia, "there was grain in abundance and palm wine and a sour drink made from the same by boiling" (2.3.14). The food is fantastic and strange, and is described via Greek expectations: "As for the dates themselves of the palm, the sort that one can see in Greece were set apart for the servants, while those laid away for the masters were selected ones, remarkable (*thaumasiai*) for their beauty and size and with a colour altogether resembling that of amber" (2.3.15). The impressive beauty and size of the dates is reminiscent of the description of Asian produce in *Airs Waters Places* 12. Yet these foods produce unexpected results. The dates "made a pleasant morsel alongside a drink, but were apt to cause headaches" (2.3.15). Similarly, "Here also the soldiers ate for the first time the crown of the palm, and most of them were surprised (*ethaumasan*) not alone at its appearance, but at the peculiar nature of its flavour. This, too, however, was exceedingly apt to cause headaches" (2.3.16). The description of consumption follows after a particularly tough stretch of journey, where the Greeks are trapped by flooded waterways and have to struggle through the mud to build makeshift bridges in order to escape (2.3.10–13). Their enjoyment of exotic foods through their exploitation of the villages comes as somewhat of a reprieve. The emphasis on the strangeness of the food can be read as participating in a self-affirmatory discourse of Otherness; yet it can also hint at experiences that are slightly discomfiting.

In Armenia, after a terrible journey through the snow, where many men die of exhaustion or cold, they attack and occupy villages, taking the local chief and his family hostage, billeting themselves on the local homes and appropriating their stores. The villages are described in terms of goods to be consumed: "In the houses were goats, sheep, cattle, fowls, and their young" (4.5.25); "Here were also wheat, barley, and beans, and barley-wine in large bowls" (4.5.26). There are also erotic attractions, reminiscent of Xenophon's description of Asia as full of erotic opportunities that might ensnare the Greeks and make them forget their way home, like the Lotus Eaters (3.2.25). Among the list of people and property captured, there is included "the village chief's daughter, who had been married eight days before" (4.5.24). The detail of her recent marriage sexualizes her, hinting at her potential exploitation by the Greeks. The chief's son is also presented in terms of availability for sexual use: a boy "just coming into the prime of youth" (4.6.1), he is carried off by the man who had been charged with keeping him as a hostage ("Pleisthenes, however, desired the boy, took him home with him, and found him absolutely faithful" 4.6.3).

From victims of a harsh environment, the Greeks become violent exploiters of foreign plenty. But again, there is an emphasis on strangeness, and a sense that the Greeks are taking on unusual forms of experience. In contrast to the Greek manner of drinking, the barleywine is drunk straight from the vat with straws: "when one was thirsty, he had to take these [straws] into his mouth and suck. It was an extremely strong drink unless one diluted it with water, and

extremely good when one was used to it" (4.5.27). The soldiers indulge in unusually expansive feasts, which mark both their abuse of others' property and their transformation into a different mode of being, as they become animal-like in their uncontrolled consumption: "there was no place where they did not serve on the same table lamb, kid, pork, veal, and poultry, together with many loaves of bread, some of wheat and some of barley. And whenever a man wanted out of good fellowship to drink another's health, he would draw him to the bowl, and then one had to stoop over and drink from it, sucking like an ox" (4.5.31–2).[32] The Greeks take, consume and enjoy, but they also enter into an alien world, behaving and experiencing in alien ways.

This sense of entering an altered state of experience is most explicit, and disturbing, in the land of the Colchians, where the Greeks eat honey appropriated from local villages that sends them "mad". Here, unlike in the above passages, the strangeness of the foreign poses a threat, which is described as akin to defeat by an enemy (4.8.20–21):

> The soldiers who ate of the honey all went off their heads (*aphrones*), and suffered from vomiting and diarrhoea, and not one of them could stand up, but those who had eaten a little were like people exceedingly drunk, while those who had eaten a great deal seemed like mad (*mainomenois*), or even, in some cases, dying men. So they lay there in great numbers as though the army had suffered a defeat, and great despondency (*athumia*) prevailed. On the next day, however, no one had died, and at approximately the same hour as they had eaten the honey they began to come to their senses (*anephronoun*); and on the third or fourth day they got up, as if from a drugging (*hōsper ek pharmakoposias*).

The comparison to being drugged might remind us of the experience of Odysseus' men in the house of Circe, who gives them food mixed with drugs and transforms them into pigs (Hom. *Od.* 10. 233–43): the 10,000 similarly suffer a terrible transformation as they consume foreign foods.

The text's descriptions of the consumption of foreign produce have been read as marking the essential difference of non-Greek cultures, in a way that confirms the superiority of Greek identity in contrast.[33] A contrary view has seen such scenes as marking the openness of the Greeks to foreign customs, as the soldiers happily adapt to local circumstances and ways of doing things.[34] In contrast to both these approaches, I would stress the rather more conflicted and contradictory picture of Greek experience that emerges from such encounters. The 10,000 are figured as empowered exploiters of foreign resources, but their consumption of foreign foods can mark their desperation—a moment of relief from an unremitting landscape of dangers. As they consume, they are also simultaneously confronted with the alien. This confrontation can indeed bolster Greek identity by contrast; but it can also make the Greeks behave in un-Greek ways, as they take on local customs or slip into animalistic debauchery, and can occasionally be unsettling or even (at least momentarily) transfigure the Greeks' experience. We might recall Xenophon's image of the Lotus Eaters (3.2.25), who consume and enjoy sensual delights but are left changed, no longer themselves.[35]

Colonisation or return?

The different experiences of the foreign environment that we are offered in depictions of Asia as a land of obstacles or as a land of plenty prepare us for different ways of thinking about the political significance of the 10,000's journey, and so link to broader questions regarding expectations of narrative closure and their ideological consequences. Indeed, the concerns

which emerge in these varying depictions of encounters with the foreign also surface in the text's discussions of the possibilities and problems of settlement abroad—discussions which often raise questions about the nature of Greek identity in quite conflicted and contradictory ways.[36] In what follows I will discuss three key moments where the possibility of settlement is suggested—on the approach to the Tigris River near Babylon, at Cotyora and at Calpe Harbour[37]—noting how the language of obstacles, entrapment and lands of plenty intersects with other claims about how the Greek experience abroad should be thought about.

The possibility that the 10,000 might settle in Asia is first raised in book 2 after the army have crossed canals issuing from the Tigris and are encamped on an area of land between a canal and the river. A messenger appears from Ariaeus and Artaozus saying that he has been sent to warn them that Tissaphernes intends to destroy the bridge over the Tigris during the night, "so that you may not cross, but may be cut off between the river and the canal" (2.4.17). The message causes extreme agitation and fear (2.4.18). However, the trustworthiness of the message is soon questioned, and Clearchus enquires how extensive the land between the river and canal is, to which he is told that it is a large tract with many villages and large towns in it (2.4.21). This information changes how the situation is perceived (2.4.22):

> Then it was perceived that the barbarians had sent the man with a false message out of fear that the Greeks might destroy the bridge and establish themselves permanently on the island, with the Tigris for a defence on one side and the canal on the other; in that case, they thought, the Greeks might get provisions from the territory between the river and the canal, since it was extensive and fertile and there were men in it to cultivate it; and furthermore, the spot might also become a place of refuge for anyone who might desire to do harm to the King.

The piece of land shifts from a dangerous site of entrapment to a rich land full of provisions with good natural defences—a perfect colonial site. Although at this stage of their journey colonisation is not being considered and the Greeks immediately depart the next day, this way of viewing the environment seems to co-exist with the image of a landscape of dangers. We see the co-existence of different ways of thinking about the Greeks' relationship with the foreign land in which they find themselves.

Settlement in Asia first emerges as an option to be considered in practice as Xenophon views the army near Cotyora (5.6.15):

> At this time, as Xenophon's eyes rested upon a great body of Greek hoplites, and likewise upon a great body of peltasts, bowmen, slingers and horsemen also, all of them now exceedingly efficient through constant service and all there in Pontus, where so large a force could not have been gathered by any slight outlay of money, it seemed to him that it was a fine thing to gain additional territory and power for Greece by founding a city (*chōran kai dunamin tēi Helladi prosktēsasthai polin katoikisantas*).

Here the sight of the men prompts the idea, which is described in terms of gaining territory and power for *Greece*. The army are imagined as somehow representatives of Greece as a whole. Skating over the problems in how the 10,000 relate to other Greeks (we might think especially of their awkward relationship with the Black Sea coast cities and with Spartan power in the region), the passage imagines a Panhellenic connection between this disparate band of mercenaries and a fantasy of a unified "Greece". This fantasy of unity is immediately undermined, however, as problems of power relations among the 10,000 emerge: Silanus opposes Xenophon's vision by

circulating a report "that Xenophon wanted them to settle down, so that he could found a city (*polin oikisai*) and win for himself a name and power (*onoma kai dunamin*)" (5.6.17). Xenophon is accused of pursuing power for himself. Indeed, Xenophon's colonial vision emerges through a commander's gaze over his men, and becomes the source of serious discord in the army, as the soldiers oppose a plan that they regard as being imposed upon them. The arguments that follow about the options that face the army are often quite contradictory and indicate ambivalence about how the Greeks should best think about their position in a foreign land. The image of a politically coherent "Greek identity" bolstered by the act of city foundation is shattered as the issue of settlement provokes suspicion, dissent and class-based conflict between leaders and men.[38]

Contrary to the imagined Panhellenic ideal of collective aspiration and action, the threat of settlement provokes individual self-interest. Silanus opposes the plan because he has been given 3,000 darics by Cyrus and he wants to take them to Greece, and Timasion is bribed by the Sinopeans and Heracleots to get the army to leave. Timasion's ideological-sounding statement to the soldiers—"You ought not, soldiers, to set your thoughts on remaining here, nor to esteem anything more highly than Greece" (5.6.22)—is ironic in view of his own concern with being paid. Interestingly, his arguments to the soldiers also involve the wealth that could be theirs if they leave: "I myself will lead you to places from which you will get an abundance of wealth. I am acquainted with Aeolis, Phrygia, Troas, and the entire province of Pharnabazus" (5.6.24). Suddenly, the argument for going back to Greece merges into an argument for going to other places in Asia where there are rich pickings. Similarly, Thorax (who is similarly to profit from bribes if he encourages the 10,000 to leave) insists that "It was ridiculous, when there was plenty of rich (*apthonou*) land in Greece, to be hunting for it in the domain of the barbarians" (5.6.25), yet he also says that "once they got out of the Euxine they would have the Chersonese, a fair and prosperous country, where anyone who so desired might dwell, while any who did not desire to do this, might return home (*oikade*)" (5.6.25). These arguments combine the inducements of return with the inducements of rich foreign lands or even settlement—but settlement somewhere other than in the current location—in order to get the soldiers to agree to move on.

Just as those arguing against settlement seem to employ the allurements of rich foreign lands as part of their rhetorical arsenal, in Xenophon's justification for why settlement might have been a reasonable consideration, he counter-intuitively describes it simply as a means by which to return to Greece (5.6.30):

> Now if I saw that you were without resources (*aporountas*), I should be looking about for a plan by which you might get possession of a city, with the provision that afterwards he who chose might sail back home at once, while he who did not wish to go at once might return after he had accumulated enough to bestow a little something upon his people at home (*tous heautou oikeious*).

Had they been so far without resources as to be unable to complete their return, then settlement, he claims, would have been a means to accomplish that return more effectively. The co-existing, but mutually exclusive, desires of return to Greece and settlement abroad seem to become rhetorically entwined. In the convolutions of these arguments, we see a sense of ambivalence about what these different options might mean politically: how they might frame Greek self-conception. What it means to be Greek—what a properly 'Greek' response to the situation might be—becomes a matter of concern.

Xenophon's next speech at Cotyora defending himself against the suspicion that he plans colonisation (this time in the region of the Phasis) restages the adventures of the 10,000 using

implicit mythological paradigms that suggest a desire for return, but also perhaps carry an undercurrent of ambiguity about what return might entail. He describes a symmetrically ordered natural world which structurally opposes Greece and "barbarians" (5.7.6): 'You doubtless know,' he said, 'where the sun rises and where it sets; likewise, that if a man is to go to Greece, he must journey toward the west, while if he wishes to go to the lands of the barbarians, he must travel in the opposite direction, that is, toward the east'.

Similarly: "Again, you surely know this also, that the north wind carries one out of the Euxine to Greece, while the south wind carries you within, to the Phasis" (5.7.7). In this clearly ordered world, Greeks know where they belong and where they should be headed: just as the natural order of things makes the sun rise in the east and the north wind blow, so too, it is implied, is it natural for Greeks to return to Greece. A mythological frame of reference is implied as Xenophon asks: "But suppose you have been deceived and bewitched (*goēteuthentas*) by me and we have come to the Phasis; we accordingly disembark upon the shore; you will perceive, likely enough, that you are not in Greece" (5.7.9).

The language of bewitchment is reminiscent both of the adventures of Odysseus, who faced bewitchment by Circe, and also of Jason and the Argonauts in their experiences with Medea. The land of the Phasis, we have been told, is currently ruled by the grandson of Aeetes (5.6.37), and as the 10,000 continue their journey we are told that they travel along the same route as the Argonauts ("And coursing along, they saw Jason's Cape, where the Argo is said to have come to anchor", 6.2.1). Just as both Odysseus's and Jason's travels aimed at return to Greece, it seems to be implied, so too these are the 10,000's aims. Yet interestingly, the claim that, if they disembark on the shore at the Phasis, the 10,000 will easily recognise that they are not in Greece, runs counter to the experience of Odysseus, who at first does not recognise Ithaca when he finds himself on its shores, and fears that he might be in another foreign land (Hom. *Od.* 13.187–202). Whereas Odysseus' experiences, in which home and the foreign are not always so easy to distinguish, suggest the complexity of identities, Xenophon's speech attempts to smooth over such possible concerns. Yet the intertextual echo may still allow such ambiguities to be retained in the mind of the reader—as may the incongruity of the claims about the ease of understanding where one is and where one is going in the light of the difficult and perplexing journey that the 10,000 have so far experienced, where their lack of guides has so often been a source of worry, alongside other obstacles (see above). The speech posits, and potentially also questions, a secure and comforting conceptual model for understanding the place of the 10,000 in foreign lands.

The third key moment where settlement is raised as a possibility is when the 10,000 reach Calpe Harbour. Here, the suggestion of an opportunity for colonisation emerges via narratorial description of landscape (6.4.3–6):

> Calpe Harbour lies midway on the voyage between Heracleia and Byzantium and is a bit of land jutting out into the sea, the part of it which extends seaward being a precipitous mass of rock, not less than twenty fathoms high at its lowest point, and the isthmus which connects this head with the mainland being about four plethra in width; and the space to the seaward of the isthmus is large enough for ten thousand people to dwell in (*oikēsai*). At the very foot of the rock there is a harbour whose beach faces toward the west, and an abundantly (*aphthonos*) flowing spring of fresh water close to the shore of the sea and commanded by the headland. There is also a great deal of timber of various sorts, but an especially large amount of fine ship-timber, on the very shore of the sea. The ridge extends back into the interior for about twenty stadia, and this stretch is deep-soiled and free from stones, while

> the land bordering the coast is thickly covered for a distance of more than twenty stadia with an abundance of heavy timber of all sorts. The rest of the region is fair and extensive, and contains many inhabited (*oikoumenai*) villages; for the land produces barley, wheat, beans of all kinds, millet and sesame, a sufficient quantity of figs, an abundance of grapes which yield a good sweet wine, and in fact everything except olives.

The description of the natural advantages of the place in terms of how they might be shaped to human use is reminiscent of the description of the island adjacent to the land of the Cyclopes in the *Odyssey* (Hom. *Od.* 9.116–41).[39] As Tripodi has noted, the abundance of everything except olives—a staple of Greek diet, religion and culture—marks the foreignness of the place and suggests that despite the site's attractions, the way of life established there would not be a fully Greek way of life.[40]

A curious dynamic emerges in response to the Calpe Harbour site. We are told that "The men took up quarters on the beach by the sea, refusing to encamp on the spot which might become a city" (6.4.7). They continue to refuse to make use of the advantages of the site even under threat (6.4.21–2), although eventually they are so far beset by enemies that they are forced to do so (6.5.1). Their concern that they should not settle in Calpe Harbour is ironically countered by the repeated failure of the sacrificial omens to sanction their departure. The army end up stuck in Calpe Harbour, in great desperation, without provisions, a situation some connect to Xenophon's desire to found a city: "Now some people had the effrontery to say that Xenophon, in his desire to found a city (*oikisai*) at this spot, had induced the soothsayer to declare that the sacrifices were not favourable for departure" (6.4.14).

This idea of the Calpe Harbour site as a site of entrapment also emerges after Xenophon leads out a raiding party in search of provisions, and they are faced with crossing a dangerous ravine in order to make their way back to the camp. As mentioned above, in response to Sophaenetus' claim that the ravine is impassable (6.5.13), Xenophon makes an ideological link between the traversal of difficult paths and victory, and between easy paths and defeat, in order to reframe the difficult journey before them as something to accept or even to desire as an emblem of the victory to come: "It is to the enemy that I should myself wish to have all roads seem easy (*eupora*)—for their retreat; as for ourselves, we ought to learn from the very ground (*apo tou chōriou*) before us that there is no safety for us except in victory (*mē nikōsi*)" (6.5.18). In order to stress the need for courage in facing obstacles, he reframes their intended destination—their camp at Calpe Harbour—as a site of dangerous obstacles to be overcome: "Again, if we do reach the sea in safety, what a great ravine, one may say, is the Euxine, where we have neither ships to take us away nor food to subsist upon if we remain" (6.5.20). Being in Calpe Harbour is like their position now, under threat at the edge of a ravine. Yet shortly after they make it back to the Calpe Harbour camp, the site is presented as a site of abundance. The Greeks make successful raids on the local land ("they fearlessly carried off wheat and barley, wine, beans, millet, and figs; for the country had all manner of good things, except olive oil", 6.6.1)—although, again, the strangeness and dislocation of life there is subtly hinted at by the mention of the lack of olive oil. Further, the site seems to slip into becoming the beginnings of a colonial site: "And by this time there was an abundance (*aphthonia*) of everything, for market products came in from the Greek cities on all sides, and people coasting past were glad to put in, since they heard that a city was being founded (*hōs oikizoito polis*) and that there was a harbour" (6.6.3). The Calpe Harbour site is figured simultaneously as an abundant land ripe for colonisation, and a site of entrapment from which the 10,000 are desperate to escape.

Conclusion

The *Anabasis* offers the reader a glimpse into the experience of being Greek in foreign lands. I have suggested that the text's contradictory depiction of foreign lands as an environment both of obstacles to be overcome and of rich resources to be enjoyed reflects, and constructs, a sense of ambivalence about how Greek identity functions and should be thought about. The overcoming of obstacles is indicative of Greek success. Yet there are different modes of thought about obstacles in the text. The crossing of natural boundaries can hint at the disturbing, potentially transgressive nature of the Greeks' displacement into lands to which they do not belong. The claim that there are difficult paths ahead can suggest a surrender of Greek autonomy to Persian enemies and mark a loss of Greek identity, or can become a welcome sign of impending Greek victory, prefacing and evoking the self-affirmatory notion of return. The desperation and hopelessness produced by obstacles can be countered by the re-imagination of the landscape in terms of a landscape of plenty. However, the plentiful landscape has its own ambiguities. The consumption of foreign resources can be a surprising and perturbing experience as well as an enjoyable one, and can carry the risk of self-estrangement and loss of identity as well as empowerment. Further, the plentiful landscape can suggest the possibility of settlement, or conversely, a successful, wealthy, return home, and so can provoke uncertainty about the Greeks' position.

The incorporation of this discourse of the environment within the text's highly conflicted discussions of the possibilities of colonization or return home, which are so charged with concern about the nature of Greek identity, marks the wider significance of the *Anabasis*'s interest in the environment for a reading of the text. As we read, we wonder how this is all going to end—what sort of story this is going to turn out to be regarding what it means to be Greek in a foreign land. Each encounter with the foreign frames our expectations for that story in a different light: the experiences on offer, and the arguments made about the meaning of those experiences, are varied and sometimes even paradoxical. The contradictions apparent throughout the text between different responses to the foreign environment mark and inscribe ideological contradictions in Greek thought, revealing Greek identity as a fundamentally problematic concept.[41]

Notes

1 Tripodi 1995; Brulé 1995.
2 Ma 2004; Purves 2010.
3 For the purposes of this chapter, I focus on the physical environment, especially landscape and its various features and conditions, both natural (e.g. rivers, mountains, ravines) and man-made (e.g. canals and cultivated plains full of crops). Yet as we shall see, the physical environment can be difficult to separate from the social environment: see especially my discussion of environments of abundance, which focuses both on descriptions of fertile and productive landscapes and on descriptions of villages full of provisions, and explores the social effects of consumption of foreign produce; similarly, as my discussion of obstacles shows, the fear caused by impassable rivers and mountains can merge with the fear caused by enemy troops or the lack of a guide. I consider the environment as a cultural and political construction. See Mitchell 2002, who describes landscape as "an emblem of the social relations it conceals" (15), stressing the need to avoid 'naturalising' readings of landscape: "landscape is already artifice at the moment of its beholding" (14).
4 Bradley 2001, 65–9; Grethlein 2013, 76.
5 Gauthier 1985; Grethlein 2013, 75–83; Purves 2010. Cf. Malkin 1998, who argues that the 'returns' of Odysseus became a model for narratives of colonization.

6 Grethlein 2013, 69–75. For foundation narratives in Greek literature, see Dougherty 1993, 1994 and 2001, 122–42.
7 Ma 2004 describes the *Anabasis* as "structured around the difficulty or impossibility of return" (333), noting that "resolution and return are constantly deferred" (334). Cf. Grethlein 2013, 81 on the multiple attempts of Xenophon to leave the army (6.2.15, 7.1.4, 7.1.8, 7.1.38, 7.7.57).
8 See Dillery 1995, 63, who notes "two competing panhellenisms, represented in the first instance by the need to return to Greece and second by the desire to found a new city in Asia."
9 See Purves 2010 on the relationship between narrative form and responses to a disorienting landscape: "the story of the *Anabasis* . . . increasingly meanders and wavers as it progresses through alien territory" (161).
10 See Grethlein 2013, 71 on the complexities of this speech.
11 Translations are taken from the Loeb edition of C.L. Brownson 1998 (rev. edn), with some minor modifications where necessary to bring out linguistic points.
12 Dillery 1995, 62. Contrast Rzchiladze 1980, 314, who claims that Xenophon's description of Persian and Median women as tall and beautiful is evidence of sympathy for non-Greek cultures.
13 The text registers a certain level of uncertainty regarding the ideological appropriateness of acquisition as an aim. The army is an army of mercenaries, but the mercenary has ambiguous connotations in class terms. At some moments, the *Anabasis* seems to distance Xenophon's character from the soldiers' interest in profit (see Azoulay 2004), or more generally to play down the image of the army as focused on gain ("Most of the soldiers had sailed away from Greece to undertake this service for pay, not because their means were scanty, but because they knew by report of the noble character of Cyrus", 6.4.8). Yet it never fully achieves this. We are told that as Xenophon was setting out to join Cyrus, an omen foretold that he would not win gain from the venture (6.1.23). This indicates that gain is not a concern for him, but also simultaneously raises an expectation that gain might be a consideration. In the text's closing paragraphs, after complaining about not having made any money on the journey (7.8.2), Xenophon attacks the household of the Persian Asidates (8.8.9), capturing Asidates, his wife and children, and gaining horses, oxen and other property (7.8.22–3). This closing passage has been seen as peculiarly anticlimactic and ideologically contrary, sitting strangely with earlier representations of Xenophon as uninterested in personal gain, such as in his dealings with Seuthes. See Dillery 1995, 91; also see Flower 2012, 214–15 on Xenophon's poor leadership in the raid.
14 Of course, in the earlier stages of the narrative, the 10,000's pillaging is a matter of pure survival, and it is only in the final parts of their journey, along the Black Sea coast, that pillaging for profit becomes more of a possibility.
15 Ma 2004, 339.
16 See discussions of the unsettling effects of desire for the Other in post-colonial discourse: Bhabha 1986. Gandhi 1998, 78 argues of the negative Orientalist stereotype: "in so far as it embodies the contradictory expulsions of colonial fantasy and phobia, it actualizes a potentially disruptive site of pleasure and anxiety".
17 See Purves 2010, 165 on the fluctuating meanings of the inland spaces of Asia in the text.
18 Romm 2010, 221.
19 Translation taken from W.H.S. Jones' 1868 Loeb edition. A lacuna at the end of chapter 12 immediately following the quoted text makes it uncertain whether the phrase "pleasure must be supreme" belongs to the preceding section on Asia, or to the lost section on Libya that follows. See Romm 2010, 222.
20 See Thomas 2000, 102–14.
21 See Romm 2010, 223–6.
22 Rood 2014, 66–78. I am most grateful to Tim Rood for kindly allowing me to see this article prior to publication. See also Purves 2010, esp. 177–9, and Ma 2004, 333–6.
23 Many references to the environment in this text are framed in visual terms. See Harman 2013 on the politics of the visual experiences offered to the reader of the *Anabasis*.
24 Mikalson 2003, 45.
25 Romm 2010, 213.
26 I am most grateful to the editors Rebecca Kennedy and Molly Jones-Lewis for suggesting the connection between rivers and conceptual boundaries.
27 See Rood 2014, 80–84 on the role of Xenophon's character in overcoming such impasses.
28 The question of whether or not they are trapped can also become the subject of political argument among the 10,000: often different perceptions of the environment, and so different ideas about

how they need to respond, co-exist within the army. Clearchus' (as it turns out, mistaken) belief that they need to come to terms with Ariaeus and Tissaphernes after Cyrus' death, and cannot act independently, is framed in terms of his perception of the impassability of obstacles. They cannot attack the King, says Clearchus, "for as I now ascertain, between us and the King is the Tigris, a navigable river, which we could not cross without boats—and boats we have none" (2.2.3). Some of the Greeks appeal to Clearchus, saying that they ought not to wait for Ariaeus but make their escape now, while they are still able, since "perhaps [the King] is digging a trench or building a wall somewhere to cut us off and make our road impassable (*aporos*)" (2.4.4): they think that the way is currently still passable, but fear that this will soon change. Clearchus' response is to point to the rivers that cannot be crossed: "Remember the rivers—there may be others, for aught I know, that we must cross (*diabateos*), but we know about the Euphrates at any rate, that it cannot possibly be crossed (*diabēnai*) in the face of an enemy" (2.4.6). Similarly, insisting on their reliance upon the Persians, Clearchus tells Tissaphernes "For, with you, every road is easy for us to traverse (*euporos*), every river is passable (*diabatos*), supplies are not lacking (*aporia*); without you, all our road is through darkness—for none of it do we know—every river is hard to pass (*dusporos*), every crowd excites our fears, and most fearful of all is solitude—for it is full of uncertainty (*aporias*)" (2.5.9).

29 The text here is disputed. An alternative manuscript reading (preferred by Marchant's 1904 OCT edition) avoids the language of *aporia* (*all' hina ēdē polla prophainoito tois Hellēsi deina eis tēn poreian* . . .).

30 We can compare the description of Xenophon's future estate at Scillous (5.3.7–13), which similarly stresses the productiveness of the land. Dillery 1995, 90 has read the account of Scillous as suggesting a model for the colony that Xenophon never is able to found: "perhaps the quiet and ordered life we see in this bucolic description is a capsule or miniature of the life he had hoped to lead as a prominent settler in Asia."

31 See Pratt 1992 on the relationship between views of landscape and power in eighteenth–twentieth-century colonial and post-colonial travel writing.

32 See Tripodi 1995, 51–2 on the animal-like qualities that the soldiers take on in their adjustment to foreign alimentary customs. Cf. 4.5.33, where Cheirisophus' men are feasting "crowned with wreaths of hay and served by Armenian boys in their strange, foreign dress; and they were showing the boys what to do by signs, as if they were deaf and dumb". Tripodi suggests that the transformation of a symbol of Hellenic culture, the symposium garland, into a form made of animal fodder marks the distance from Greek practice, while the use of signs suggests that the Greeks "devono rinunciare all'uso della parola, e dunque al *logos*, loro prerogative" (52). In contrast, Roy 2007, 75 notes that the Greeks "have made themselves very much at home" in their attempt to "find substitutes for the normal Greek life-style". I would note the complexity of this scene. The Greeks exert their power over the Armenians whose food they steal and whom they force to serve them. They attempt to participate in Greek cultural practices—to act as Greeks—but simultaneously fail to do so, also behaving in ways that are strange.

33 Tripodi 1995; Brulé 1995.

34 Roy 2007.

35 The postcolonial discourse of 'hybridity' could be applied here to describe the experience of cross-cultural interaction as producing simultaneously enriched and self-alienating identities. On the fashioning, and unsettling, of Western identities through the colonial experience, see Pratt 1992 and Clifford 1992; see Gandhi 1998, 133–4 on anxieties about colonialists abroad 'going native' in British and French imperial discourse.

36 See Ma 2004, 339: "For this ad hoc community, the temptation or the desire is to find place; to look at a landscape otherwise than as a sequence of battle scenes; to convert strategic and tactical space . . . into a place of one's own, where identity and communality could exist fully."

37 Other moments where the possibility of settlement is mentioned are at Byzantium, where, unlike in earlier passages, the soldiers want to settle but Xenophon does not (7.1.21), and in Thrace, where it is suggested that Seuthes might provide territory (7.2.38, 7.3.19, 7.5.8).

38 Dillery 1995, 77–90. Cf. Ma 2004, 340, who describes the refusal of colonisation in terms of a failure of the 10,000 to establish a secure sense of identity: "the soldiers want to go home and hence condemn themselves to the move and to this identity without place".

39 See Dougherty 2001, 129 on the *Odyssey*'s description of the island near the Cyclopes in terms of colonial possibilities.

40 Tripodi 1995, 44.

41 I would like to thank Rebecca Kennedy and Molly Jones-Lewis for their kind invitation to contribute to this collection, and for their very helpful suggestions for this chapter.

Bibliography

Azoulay, Vincent. 2004. "Exchange as Entrapment: Mercenary Xenophon?" In *The Long March: Xenophon and the Ten Thousand*, edited by Robin Lane Fox, 289–304. New Haven, CT: Yale University Press.

Bhabha, Homi. 1986. "The Other Question: Difference, Discrimination and the Discourse of Colonialism." In *Literature, Politics and Theory*, edited by Francis Barker, Peter Hulme, Margaret Iversen and Diana Loxley, 148–72. London: Methuen.

Bradley, Patrick. 2001. "Irony and the Narrator in Xenophon's *Anabasis*." In *Essays in Honour of Gordon Williams*, edited by E.I. Tylawsky and C.G. Weiss, 59–84. New Haven, CT: H.R. Schwab.

Brulé, Pierre. 1995. "Un nouveau monde ou le même monde?" In *Dans les Pas des Dix-Mille:Peuple et Pays du Proche-Orient Vus par un Grec*, edited by Pierre J. Briant, 3–20. Toulouse: Presses Universitaires du Mirail (=*Pallas* 43).

Clifford, James. 1992. "Travelling Cultures." In *Cultural Studies*, edited by Lawrence Grossberg, Cary Nelson and Paula Treichler, 96–112. New York: Routledge.

Dillery, John. 1995. *Xenophon and the History of his Times.* London and New York: Routledge.

Dougherty, Carol. 1993. *The Poetics of Colonization: From City to Text in Archaic Greece.* Oxford: Oxford University Press.

——. 1994. "Archaic Greek Foundation Poetry: Questions of Genre and Occasion." *Journal of Hellenic Studies* 114: 35–46.

——. 2001. *The Raft of Odysseus: The Ethnographic Imagination of Homer's* Odyssey. Oxford: Oxford University Press.

Flower, Michael. 2012. *Xenophon's* Anabasis *or The Expedition of Cyrus.* Oxford: Oxford University Press.

Gandhi, Leela. 1998. *Postcolonial Theory: A Critical Introduction.* Edinburgh: Edinburgh University Press.

Gauthier, Philippe. 1985. "Xénophon et l'Odyssée des 'Dix-Mille'." *L'Histoire* 79: 16–25.

Grethlein, Jonas. 2013. *Experience and Teleology in Ancient Historiography: 'Futures past' from Herodotus to Augustine*. Cambridge: Cambridge University Press.

Harman, Rosie. 2013. "Looking at the Other: Visual Mediation and Greek Identity inXenophon's *Anabasis.*" In *Ancient Ethnography: New Approaches*, edited by Eran Almagor and Joseph Skinner, 79–96. London: Bloomsbury.

Ma, John. 2004. "You Can't Go Home Again: Displacement and Identity in Xenophon's *Anabasis.*" In *The Long March: Xenophon and the Ten Thousand*, edited by Robin Lane Fox, 330–45. New Haven, CT: Yale University Press.

Malkin, Irad. 1998. *The Returns of Odysseus: Colonization and Ethnicity.* Berkeley and Los Angeles: University of California Press.

Mikalson, Jon D. 2003. *Herodotus and Religion in the Persian Wars*. Chapel Hill: University of North Carolina Press.

Mitchell, W.J.T. 2002. "Imperial Landscape." In *Landscape and Power*, 2nd edn., edited by W.J.T. Mitchell, 5–34. Chicago, IL: University of Chicago Press.

Pratt, Mary Louise. 1992. *Imperial Eyes: Travel Writing and Transculturation*. London: Routledge.

Purves, Alex. C. 2010. *Space and Time in Ancient Greek Narrative*. Cambridge: Cambridge University Press.

Romm, James. 2010. "Continents, Climates and Cultures: Greek Theories of Global Structure." In *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies*, edited by Kurt A. Raaflaub and Richard J.A. Talbert. Oxford and Malden: Wiley-Blackwell.

Rood, Tim. 2014. "Space and Landscape in Xenophon's *Anabasis.*" In *Space, Place and Landscape in Ancient Greek Literature and Culture*, edited by Kate Gilhuly and Nancy Worman, 63–93. New York and Cambridge: Cambridge University Press.

Roy, James. 2007. "Xenophon's *Anabasis* as a Traveller's Memoir." In *Travel, Geography and Culture in Ancient Greece, Egypt and the Near East*, edited by Colin Adams and James Roy, 66–77. Oxford: Oxbow.

Rzchiladze, Rusudan. 1980. “L’Orient dans les Oeuvres de Xénophon.” *Klio* 62: 311–16.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science and the Art of Persuasion.* Cambridge: Cambridge University Press.
Tripodi, Bruno. 1995. “Il Cibo dell’Altro: Regimi e Codici Alimentari nell’ *Anabasi* di Senofonte.” In *Dans les Pas des Dix-Mille: Peuple et Pays du Proche-Orient Vus par un Grec*, edited by Pierre J. Briant, 41–58. Toulouse: Presses Universitaires du Mirail (=*Pallas* 43).

9

THE WORLD IN A PILL

Local specialties and global remedies in the Graeco-Roman world[1]

Laurence M.V. Totelin

Theriac: the global remedy par excellence

Theriac is arguably the best-known medicament created in antiquity. It was an antidote, that is, a medicament whose primary purpose was to protect against poisons and venoms, but which was also used as a remedy in a vast array of ailments—in a word, a panacea. It had been created by Andromachus the Elder, physician to the Emperor Nero, and was based on the antidote recipe of King Mithradates VI of Pontus, but with the addition of viper flesh. Andromachus wrote the recipe into a complex, at times even obscure, elegiac poem; his son, Andromachus the Younger, 'translated' it into prose; while Damocrates composed a much simpler poetic version in iambic trimetre.[2] The recipe appears in all major pharmacological treatises written after Nero's reign, and entire treatises were devoted to the antidote. Two of these treatises survive in the Galenic Corpus, although the authorship of both texts is much debated: *Theriac to Piso* and *Theriac to Pamphilianus*.[3] Galen (129–216 CE) himself devoted much of his *On Antidotes* to the drug. According to the physician, the Emperor Marcus Aurelius consumed theriac every day, spurring on a fashion for the drug among the Roman elite.[4] We do not have exact information on the price of this antidote, but it clearly fetched a high price and people were sometimes tricked into buying counterfeited goods (Galen, *De Theriaca ad Pisonem* 2; 14.216 Kühn = 58 Leigh):

> For there is much adulteration (*panourgia*) practiced on this drug by dishonest vendors (*tōn panourgountōn*) and many are deceived by the very reputation (*tē doxē monē*) of the antidote, purchasing it at the highest price from those who practice the art (*tē technē*) purely for monetary gain, even though it has not been prepared well.[5]

The preparation itself was not without its detractors. Pliny the Elder, in a long invective against medical fads, singles out theriac in the following way: "There is an over-complicated composition called 'theriace'. Luxury (*luxuria*) fashioned it from countless ingredients (literally: 600), although Nature (*natura*) has provided so many remedies, each of which would suffice on its own (HN 29.24)."

In Pliny's eyes, such extravagance is a Greek ill; it is an import like so many of the ingredients theriac contained. Why accumulate expensive ingredients when one single remedy

provided by Nature will suffice?[6] Theriac featured prominently in Pliny's diatribe against luxurious medicine not only because it included numerous ingredients but also because many of these ingredients were exotic substances, substances qualified geographically.[7] Andromachus' elegiac poem on theriac makes reference to (in order of appearance): Illyrian iris, Syrian balsam, Indian cassia, camel's hay brought by the Arab nomads, Libyan turpentine, nard brought by a Galatian man, Lemnian earth, Pontic spikenard (*phou*), cardamom from the Ida, Istrian beaver, and honey of Actaios (=Attica).[8] The prose version, for its part, mentions (again in order of appearance): Cretan garlic germander, Illyrian iris, Pontic agaric, Pontic rhubarb, Cretan dittany, Indian nard, Cretan hulwort, Celtic nard, Lemnian earth, Pontic spikenard, and Attic honey. In addition to these geographically qualified products, the recipe contains various other herbs that could not be grown in the Roman Empire, however big it was in the first centuries of the Common Era: cinnamon, sap of the balsam tree, myrrh, costus, white pepper, long pepper, ginger, and frankincense.

Scholars such as Rebecca Flemming and Trevor Murphy have stressed the similarities between encyclopaedic projects, large recipe collections, and accumulations of ingredients from the four corners of the world within a recipe in the Roman world. The extent, wealth, and power of the Roman Empire facilitated the creation of these global recipes; and in turn the empire benefited from the ordering and mapping these recipes allowed of the space both within and outside of the empire's borders.[9] Building upon these conclusions, I would argue that there is something more than mapping and ordering to the act of accumulating exotic and local ingredients in a recipe; the significance of this accumulation goes beyond 'mere' knowledge.[10] Antidotes such as theriac are the world in a pill (or rather in electuary form): they are meant to be consumed, swallowed by the emperor to whom they are offered. The empire (and what lies beyond) is embodied in the recipe and again embodied, swallowed by the emperor—the body of the emperor, the body of the recipe, and the body of the empire coalesce when Marcus Aurelius takes his daily dose of theriac.

In this chapter, I want to show how important pharmacological texts are to appraising the strong links between, on the one hand, ethnicity and imperialism, and on the other hand, elite consumption—and even consumerism—in the ancient world.[11] I will first concentrate on individual ingredients, and in particular on those products qualified geographically that are listed in ancient recipes. Following the work of Lin Foxhall on archaic trade (1998 and 2005), I will argue that in many cases these 'local specialties' (products qualified geographically) were luxuries or items of desire, used by elites in constructing their identities, while the ingredients themselves acted as defining elements of the regions from which they came. My understanding of the notion of 'luxury' is also informed by the work of anthropologist Arjun Appadurai, who has noted that any good has the potential to become a 'luxury' and gave the following definition: "I propose that we regard luxury goods not so much in contrast to necessities (a contrast filled with problems), but as goods whose principal use is *rhetorical* and *social*, goods that are simply *incarnated signs*."[12] After focusing on single ingredients found in recipes, I will then turn to further examples of 'global remedies'. These remedies, created mostly in the Hellenistic period and the Roman Empire, mapped conquered, conquerable, and un-conquerable territories in easily digestible products with wonderful health-giving properties.

Local specialities

The Greeks (and the Romans after them) did not have a legal system of *appellations d'origine contrôlées* or food name scheme, but they often identified commodities—foods, drinks, minerals, items of clothing—with their alleged place of production: wine from Thasos, perfume

from Egypt, wool from Miletus, honey from Attica, etc. Greek people also referred to themselves in this way: Socrates of Athens, Herodotus of Halicarnassus, Thales of Miletus. They belonged to a constellation of independent city-states, where citizens identified with their *polis* (Athens, Halicarnassus, Miletus, etc.) rather than with an abstract 'Greek world'. I would argue that it is not a coincidence that the Greeks, who placed such emphasis on their *political* or ethnic identity, identified many of their products with their place of origin. But while all citizens were entitled to use their ethnic when 'abroad', only certain products were identified in this way, and were thus invested with special meaning.[13] We must therefore ask which goods are thus qualified and what this signifies. Geographically qualified products are documented from the very beginning of Greek literature, with several examples in the works of the archaic poets. Lin Foxhall (1998) refers to these archaic products as "local specialties".[14] These, she argues, played a key role in social competition in the archaic world. Elites around the Mediterranean constructed their identity through their consumption patterns. In this complex process, desire for such products as Ismarian wine (Archilochus fr. 2) or Lydian headbands (Sappho fr. 98) and social emulation played a more important role than actual need. Archaic poems are an excellent starting point for a study of local specialties in the ancient Greek world, but their fragmentary nature prevents scholars from drawing any broad conclusion.

Local specialties happen to figure prominently in ancient medical (and more specifically pharmacological) texts, starting with the recipes preserved in the Hippocratic Corpus, which are to be counted among the earliest fully preserved Greek prose texts, as they date for the most part to the end of the fifth century and the beginning of the fourth century BCE. Local specialties listed in the Hippocratic recipes include Egyptian alum, Indian pepper, Ethiopian cumin, Pontic nut, Attic honey, Chian wine, Milesian wool, Thasian nut, and Egyptian perfume (see Table 9.1). They are listed either as part of a recipe or as single items in dietetic lists. The geographical epithets attached to these Hippocratic ingredients refer to places both within the classical Greek world and beyond its boundaries.[15] Egypt and Ethiopia figure most prominently, while lands in the West Mediterranean are almost absent.

The Hippocratic recipes and dietetic prescriptions were written before the conquests of Alexander the Great, which dramatically increased the number of specialties available to Greek speakers. Alexander's expeditions included scholars who mapped and described new discoveries and natural products hitherto known only in dried and chopped form. As Rebecca Flemming writes:

> This assimilation [of exotic ingredients] was about more than simply expanding the pharmaceutical repertoire of Greek medicine; it also helped to bring order to the contents of the newly conquered territories, to generate and manage knowledge about their flora, fauna and minerals, in acceptable and familiar ways. The plants, animals and stones of the Hellenistic world could be pharmacologically mapped and organized, and so brought into a beneficial relationship with humanity, and its Greek portion in particular, as this organization occurred around an established Greek centre, taking Greek literary forms.[16]

Unfortunately, no pharmacological writing of the Hellenistic period is preserved in full (there were many); we know of them through the writings of Galen and other medical writers active in the first and second centuries CE.[17] We also get glimpses of pharmacological activity in the botanical writings of Theophrastus of Eresus (*Hist. pl.* and *Caus. pl.*), and in various papyri from Hellenistic Egypt. In all these sources, 'local specialties' certainly are extremely numerous. The influx and assimilation of medically active ingredients continued throughout the

Table 9.1 Local specialities listed in the Hippocratic Corpus

Attica	honey	3 occurrences
Cadiz (modern Spain)	salt-fish	2 occurrences
Chios (island of the Aegean)	wine	1 occurrence
Cilicia (modern Turkey)	hyssop	2 occurrences
Cnidus (modern Turkey)	'berry' (*Daphne gnidium* L.)	26 occurrences
Crete	'poplar' (*Zelkova cretica* Spach)	2 occurrences
	kedros (a juniper, *Juniperus* sp.)	2 occurrences
	ivy	1 occurrence
Cyprus	'ash' (resulting from the smelting of copper)	7 occurrences
	salt	2 occurrences
Egypt	'acorn' (*Moringa peregrina* Forskk.)	1 occurrence
	alum	13 occurrences
	'bean' (*Nelumbo nucifera* Gaertn.)	2 occurrences
	linen	1 occurrence
	natron	8 occurrences
	perfume (or oil or ointment)	27 occurrences
	saffron	1 occurrence
	salt	2 occurrences
	'thorn' (*Acacia nilotica* Wild.)	3 occurrences
Eretria (in Euboea)	earth	2 occurrences
Ethiopia	'cumin' (*Nigella sativa* L.)	35 occurrences
	root (? *Salvia aethiopis* L.)	1 occurrence
	daukos (*Bupleurum fruticosum* L.)	2 occurrences
India	pepper	2 occurrences
Libya	'leaf' (leaf of silphium?)	1 occurrence
Massalia (modern France)	hartwort (*Seseli tortuosum* L.)	1 occurrence
Melos (island of the Aegean)	alum	4 occurrences
Mende (North of Greece)	wine	4 occurrences
Miletus (modern Turkey)	wool	1 occurrence
Pontus	nuts (hazelnut, *Corylus avellana* L.)	1 occurrence
Orchomenos (Greece)	'powder' (the powder made from plants growing around Lake Copais?)	1 occurrence
Samos (island of the Aegean)	earth	1 occurrence
Scyros (island of the Aegean)	goat	1 occurrence
Thebes (in Egypt)	salt	2 occurrences
Thasos (island of the Northern Aegean)	nuts	1 occurrence
	wine	1 occurrence
Zakynthos (island of the Ionian Sea	bitumen	1 occurrence

Hellenistic period and reached a crescendo in the first centuries of the Roman Empire. I have attempted to list the 'local specialties' found in the pharmacological writings of Galen in Table 9.2 but am fully aware that my list is far from exhaustive. Here again Egypt and Ethiopia figure prominently, as do Pontus, Syria, Crete, and India. As in the Hippocratic recipes, localities in the West are not named regularly, although Spanish products do occur with some frequency. In general, there is a symbolic link between the East and *pharmaka*. Some of the local specialties named in the Hippocratic Corpus do not occur in the Galenic texts (Milesian wool, for instance), but most do, indicating that there was much continuity in the valuation

of some products. For some products, the lists of varieties also increased exponentially. For instance, the Hippocratic Corpus only names four local varieties of wine, while the Galenic Corpus has well over ten. Or, where the Hippocratic recipes only contained one type of nard, simply called 'nard' (*nardos*), the Galenic recipes list four types: Indian, Celtic, Syrian, and Cretan nard, to which should be added Pontic *phou*.[18] Of the Syrian nard, Dioscorides informs us that it is called 'Syrian' "not because it is found in Syria, but because the part of the mountain on which it grows faces Syria, while the other part faces India" (*De Materia Medica* 1.7).

Table 9.2 Local specialities listed in the works of Galen on compound remedies

Arabia	camel's hay, myrrh (Trogloditic myrrh), perfume
Attica	honey, grease extracted from sheep's wool (*oisupon*), propolis (by-product of honey)
Cilicia (modern Turkey)	burnt cloth, hyssop, saffron
Chios	mastic, wax, wine
Cnidus (modern Turkey)	'berry' (*Daphne gnidium* L.), wine
Crete	birthwort, *daukos*, dittany, hyssop, 'nard' (*Valeriana* sp.), wine (a sweet wine)
Cyrene	'sap' (sap of silphium?), *panax* (?)—see also under 'Libya'
Cyprus	'ash' (resulting from the smelting of copper), calamine, copper, *misu* (a copper ore), reed, scales (of copper), verdigris
Egypt	'acorn' (*Moringa peregrina* Forskk.), alum, 'bean' (*Nelumbo nucifera* Gaertn.), perfume, *sōru* (an ore), thorn
Eretria (in Euboea)	earth
Ethiopia	'cumin' (*Nigella sativa* L.), earth
Gaul	nard (Celtic nard)
Illyria	iris
India	aloe, cassia, costus, indigo, *lykion*, nard, reed
Istria	beaver, oil
Italy	wine
Kimolos (island of the Aegean)	earth
Lemnos	earth (also called 'seal' or *miltos*)
Libya	sap (sap of silphium?), turpentine
Massalia (modern France)	hartwort (*Seseli tortuosum* L.)
Mendes (Egypt)	perfume
Mende (Northern Greece)	wine
Miletus (modern Turkey)	alum, natron
Pontus	agaric, fish bile, liquorice, nuts, rhubarb, spikenard, wormwood
Rhodes	*psimythion* (white lead), wine
Samos	earth (also known as *astēr*)
Selinunte (Sicily)	earth
Sinope (modern Turkey)	ruddle
Spain/Iberia	cumin, oil, opium poppy, rock parsley, salt
Syria	balsam, nard, reed, palm, perfume, sap (sap of asafoetida?), stone parsley, stone, sumac
Thebes (in Egypt)	'cumin' (*Nigella sativa* L.), gum, palm nut, southernwood (*Artemisia abrotonum L.*)
Thyrrhenia (modern Italy)	wax
Zakynthos (island of the Ionian Sea)	bitumen

This multiplication of local varieties of plants and other products led Pliny and Dioscorides (who had sources in common) to draw hierarchical lists. This is what Pliny has to say about nard (*HN* 12.45): "When it has aged, blacker nard (*nardo colos*) [speaking of the Indian nard], is better. In our world (*orbe*), the next one to be praised is the Syrian, then the Gallic/Celtic (*Gallicum*), and in third place the Cretan, which some call '*agrion*' (wild), and others '*phu*.'"

Through such lists Pliny, and others who wrote them (such as Dioscorides), introduced an element of quality appreciation linked to the geographical origin of natural substances. They also conferred a more 'luxurious' status to the highest-ranking local plants.

Until now, I have used the phrase 'local specialties' for any ingredient qualified by a geographical epithet. The notion, however, needs refinement, as the geographical epithets that qualify such products can play various functions, which I shall now review, starting with plants, and then moving to other products. With the case of nard, we have already seen that epithets could be used to distinguish between several plant species.[19] Theophrastus and other botanical writers often listed various species of plants geographically qualified, as in the following example:

> The onions and garlics also differ in types (*genei*). The types (*genē*) of onions are more numerous, for instance those called after their regions Sardian, Cnidian, Samothracian (*Sardia, Knidia, Samothrakia*); and again the 'annual (*sētania*)', the 'split (*schista*)' and the Ascalonian (*Askalōnia*) (*Historia Plantarum* 7.4.7).

Of these varieties of onions, only the "Ascalon" can be identified as the shallot.[20] Theophrastus himself does not name geographical varieties of garlic, but one finds reference to a garlic of Tenos (one of the Cyclades), which may or may not be an invention, in a recipe in Aristophanes' *Plutus* (718); to Megarian garlic in Aristophanes' *Peace* (1000) and *Acharnians* (521; 761; 813); to garlic from Tlos and "the Oasis" in a papyrus of the Zenon archive (PSI 433 = P. Cairo Zen. 59299; date 250 BCE); and to Gallic garlic in the Hippiatric texts (e.g. *Hippiatrica Berolensis* 7.4).[21] Note that apart from the veterinary treatises, no ancient medical text refers to a local variety of garlic—or of onion, leek, cucumber, or other common items of diet. Differentiating between local species of staple plants was important for agriculturists or comedians seeking political puns, but not for physicians: for them, all onions had the same qualities. Neither did they, for instance, indicate the locality of plants such as hellebore (widely used as a purge in antiquity), even though it was a well-known fact that localities even extremely close to each other could produce plants with widely differing properties. Thus Theophrastus wrote:

> For this reason the pharmacological properties of drugs are better in some localities than in others, even though they are not very distant from each other. For instance, the hellebore of Mount Oeta is better than that of Mount Parnassus (for it [the Parnassian hellebore] seems too strong to be suitable for use) . . . Some regions do not fully concoct (*ekpettousin*) pharmacological properties. Thus black hellebore and other roots are found in many places, but some are dull (*ambleiai*) or without power (*adunatoi*). (*De Causis Plantarum* 6.13.4–5)

One does not find references to 'Oetian' or 'Parnassian' hellebore in ancient pharmacological recipes. So when did pharmacological writers use geographical epithets? Primarily, they did this when confusing plant species could have dangerous implications. For example, the ancients often measured pharmacological quantities in 'nuts'; it was therefore important for them to differentiate, for instance, between the 'Thasian nut' (our almond) and the

'Pontic nut' (our hazelnut).[22] They also took care to specify when a recipe required 'Ethiopian cumin' or 'Egyptian bean' because these plants, although named by analogy with Greek cumin and beans, were entirely different—Ethiopian cumin is our nigella (*Nigella sativa* L.) and Egyptian bean is our pink lotus (*Nelumbo nucifera* Gaertn.).[23] Neither the 'Egyptian bean' nor the 'Egyptian cumin' were particularly rare; they were probably also grown in the northern Mediterranean by the classical period. It would probably be inappropriate to call all these ingredients 'luxuries' without qualification. However, it should be noted that the geographical epithet in 'Egyptian bean' and 'Ethiopian cumin' draws the eye towards these rather common ingredients; it makes them more conspicuous. While the product itself is banal, the written recipe that includes them becomes fancy. The words 'Egyptian' and 'Ethiopian' conjure up images of exotic lands (even after Egypt started to be ruled by the Macedonian Ptolemies, Egypt retained its aura of exoticism). The epithet 'Egyptian' also recalled the alleged origins of the pharmacological art; various ancient authors indeed believed medicine to have originated in Egypt.[24] Thus, in the cases of 'Egyptian bean' and 'Ethiopian cumin', the epithet played a symbolic role in addition to a botanical role. In some cases, pharmacological writers also used a geographical epithet when it was not strictly necessary, as in the case of 'Cretan dittany'. Indeed, dittany (*Origanum dictamnus* L.) only grew in southern Greece and Crete (the plant that the ancients called 'false dittany' had a larger distribution). While the epithet was not really needed, it did have a symbolic function in reminding readers of Crete's reputation for pharmacological herbs,[25] for Crete was a land with a rich pharmacological patrimony. Thus, the author of *Theriac to Piso* noted of Andromachus that "he was of Cretan ethnicity (*genos*), and it seems fair that Crete, just as it produces many herbs, should produce such a man to be, as it were, a beneficial drug for man" (*Theriaca ad Pisonem* 1, 14.211 Kühn).[26]

The case of nard is particularly enlightening when trying to understand the functions of geographical epithets attached to pharmacological products. Pliny informs us that Indian nard fetched 100 denarii a pound, while Gallic nard only cost 3 denarii (*HN* 12.42–3). The Indian nard was clearly a luxury item. Indian/Syrian spikenard was also a different plant from Celtic/Cretan nard, with slightly different pharmacological properties.[27] From the point of view of modern botany, all these nards are part of the Valerianaceae family, but the Indian/Syrian nard are varieties of spikenard (*Nardostachys jatamansi* DC), while the Celtic and Cretan nards are varieties of valerian (*Valeriana* spp.).[28] The epithets, then, served to differentiate botanic species, but also called to mind strong images: exoticism in the case of India; health-giving landscapes in the case of Crete.

It should be noted that many of the plants that truly required import throughout antiquity were not qualified with geographical epithets, at least in the earliest pharmacological texts; rather they had Semitic names that reflected trade routes: myrrh (*smyrna*) and frankincense (*libanoton*) came from Arabia; cassia (*kassia*) and cinnamon (*kinnamōmon*) came from South-East Asia via Arabia.[29] These are real 'luxuries', yet they are not qualified geographically.

So far I have focused on geographical epithets attached to plants in medical writings. These epithets are also attached to other types of products: minerals, wool, wine, honey, and perfume. Space does not allow me to review all of these, and I will therefore focus on 'earths' and 'perfumes'. 'Salts' and 'earths' are often qualified geographically in ancient medical texts. The name here reflected what we would understand to be the unique chemical composition of local clays and minerals. In the Hippocratic Corpus, we find references to Eretrian earth and Samian earth. Both these 'earths' are also found in the Galenic Corpus, in addition to the Cimolian, Sinopic, Selinunte, and above all, Lemnian earths.[30] The testimony of Galen on the

Lemnian earth (also called Lemnia seal, *sphragis*, or Lemnian ruddle, *miltos*) is particularly useful.[31] Galen tells us how he decided to visit Lemnos to find out whether he could trust Dioscorides' claim (*De Materia Medica* 5.97) that the earth was mixed with goat's blood, hence its red colour. When, after a failed attempt and much travelling, he finally got to the hill where the earth was extracted, this is what happened:

> This was the ridge where the Priestess [of Artemis] arrived when I disembarked on the island. And she threw a certain amount of wheat and barley to the ground and performed some other rites according to the local tradition. Then she filled an entire wagon with the earth. As she reached the city, as I have just said, she prepared the notorious Lemnian seals (*tas poluthrulētous Lēmnias*). It seemed good to me then to ask whether there was any blood of he- or she-goat mixed to the earth, as is mentioned in the story. All those who heard this question laughed, and they were not just random men, but people who were well educated in all matters of local folklore and other matters. Indeed, I received a book from one of them, written by a local man of old, which teaches all the uses of Lemnian earth. Hence I did not hesitate to test the remedy (*tou pharmakou*) myself, and I took twenty thousand seals (*sphragidas*). (*De Simplicium Medicamentorum temperamentis ac facultatibus* 9.2 12.173–4 Kühn)[32]

It is quite possible that Galen is exaggerating here, but this account nevertheless remains an invaluable source. It shows how fantastical stories circulated about local specialties, hence adding to their attraction. In many ways, these stories advertised the product. The stamp on the seals too may have served an advertising function. Vivian Nutton uses the phrase 'advertising mark' in relation to this stamp, while Antje Krug and Marie-Helene Marganne use the phrases 'Markenartikel' and 'produit de marque' respectively in relation to the Lemnian earth.[33]

The ancients also used stamps to mark the vessels in which wine and perfume circulated.[34] For instance, bottles inscribed with the word '*lykion*' have been found in various locations, including Paestum, Tarentum, Athens, and Morgantina, where 54 specimens were discovered between 1955 and 1958.[35] The earliest examples date to the third century BCE. The inscription '*lykion*' most probably refers to what ancient pharmacological writers call 'Indian *lykion*', an unguent, still used in India in the nineteenth century, prepared from the wood and roots of several species of *Berberis* and employed in the treatment of various diseases, with particular applications in ophthalmology.[36] Note that the bottles do not bear the epithet 'Indian'; this is what is found in texts, where it allows one to distinguish this unguent from a plant called *lykion*, while also evoking the image of distant India.

'Indian *lykion*' is one of several geographically qualified ointments or perfumes listed in Galen's recipes. Mendesian ointment or perfume is another such case, to which I now turn. A fragment of the pharmacologist Apollonius (first century BCE) informs us that during his life the best 'Mendesian' was prepared in Egypt.[37] This is rather unsurprising, as this perfume was named after the town of Mendes, capital of the Mendesian Nome in the Nile Delta.[38] The town flourished during the Hellenistic period, but declined in the Roman Empire. Its twin town, Thmuis, then took over in the production of perfume, as is testified by the large number of perfume jars (ceramic and glass) excavated there. It should be noted, however, that no centre of perfume production has yet been identified archaeologically either at Mendes or at Thmuis.[39] In addition, Mendes was apparently not the only place where 'Mendesian' perfume was produced. According to Pliny, the best Mendesian came from Phoenicia (*HN* 13.5–6)!

Figure 9.1 Collection of medical instruments from various parts of the Graeco-Roman world, including, on the right, a small lead pharmacological container inscribed 'Lykion from Mousaios', from Athens. Courtesy of the British Museum

Clearly, the geographical epithet here referred to a standard of quality and/or a recipe rather than an exact origin.

The earliest reference to Mendesian perfume is to be found in a papyrus of the Zenon archive (P. Cairo Zen. 59089 = Trismegistos 743), dating to 257 BCE, where the author states that he has received perfume from Zenon. This type of perfume does not appear in the Hippocratic Corpus, where one only finds references to one geographically qualified ointment: the Egyptian, used mainly in gynaecological practice. According to Theophrastus, the Egyptian perfume included, among other things, myrrh and cinnamon, two ingredients that did not grow in Egypt (*De Odoribus* 28–9). To produce this oil, the Egyptians themselves had to import ingredients. Some 'Egyptian perfume' must have been imported into the Greek and Roman worlds from Egypt, but it seems that some Egyptian perfumers moved to the Greek world, where they produced their wares. The comedian Strattis mentions the Egyptian perfumer Deinas, presumably active at Athens.[40] Theophrastus and two classical poets mention the exorbitant cost of this perfume.[41] It is quite clear that the Egyptian perfume, when used in medical preparations, added to their cost and status.

The examples of the Mendesian and Egyptian perfumes point to the complexity of product naming in the ancient world. It is interesting to note that, in early texts, a vague reference to 'Egypt' is sufficient to emphasise the quality of a perfume. In the Hellenistic period, as they got to know Egypt better, the Greeks introduced greater specificity in the naming of its perfumes, starting to refer to more determined places of production. The Egyptian and Mendesian perfumes were probably first produced in Egypt and Mendes, but with time their production expanded to other parts of the Mediterranean world. The name, however, remained, probably because it evoked a land that had produced and exported scents for millennia (Figure 9.1).[42]

With the case of perfume in ancient medicine, we have moved from single ingredients to compound products. I now turn to these.

Global remedies

Like the ingredients they contain, some ancient medicinal recipes bore a regional name. The Hippocratic Corpus contains the recipe of an 'Indian remedy' for the teeth and that of a Carian remedy for the treatment of ulcers.[43] The Galenic pharmacological texts, for their part, include recipes for an Indian collyrium (i.e., eye salve); an Indian royal remedy; an Egyptian 'grey' plaster (*phaia*) of Andromachus; an Egyptian remedy of the surgeon Claudius Philoxenus; various recipes for a Cyzican plaster; and a Pontic remedy.[44] An Egyptian drug (*pharmakon*) is also mentioned on a papyrus dating to the second century CE that reports the payment of taxes for various products, which also include 'Syrian wool' (P. Princ. 3 132 = Trismegistos 27130). The 'Egyptian' and 'Indian' epithets in the geographical naming of recipes are once again prominent.

It is difficult to determine what exactly makes these recipes 'Egyptian', 'Indian', 'Carian', 'Pontic', etc. Each case must be studied separately. I will here focus on the 'Indian' recipes, starting with the 'light-blue Indian collyrium':

> The so-called light blue Indian collyrium, preventative against any eye-disease; it works against dim-sightedness and scabby afflictions and malodorous corners of the eyes, and it is smeared on scars. Its main use is to protect the eyes after the application of eye salves: psimythion [white lead] from Rhodes, 48 *drachmai*;[45] Cyprian calamine, 24 dr.; dark (*melanos*) Indian [pigment], 8 dr.; opium, 8 dr., white pepper, 8 dr.; opobalsamum 8 or 6 dr.; gum, 16 dr.; cinnamon (*kinnamōmou)*, 2 dr. (in other copies 12), spring water. (Galen, *De Compositione Medicamentorum secundum Locos* 4.8; 12.780–81 Kühn).[46]

One of the ingredients in this preparation is the 'Indian' component, that is, indigo, a pigment, which according to Dioscorides was extracted either from Indian reeds or from the murex (*Materia Medica* 5.92). That pigment gave this remedy its blue colour. The remedy also included three exotic ingredients: pepper, opobalsamum, and *kinnamōmon*. Pepper grew in India, and was identified as such in ancient recipes (see Table 9.1). Opobalsamum was the juice of the balsam tree (*Commiphora opobalsamum* Engl.), which only grew in Judaea (Dioscorides, *Mat. Med.* 1.19). The identity of ancient *kinnamōmon* is debated, but I would follow Lily Beck in identifying it with *Cinnamomum cassia* Bl., our cinnamon, a plant that grows in the far East.[47] Finally, the recipe contained two further local specialties that came from within the Roman Empire: white lead from Rhodes and Cyprian calamine. This remedy was another example of 'world in a pill'; yet it is the links with India that are stressed in its title. For the Greeks and the Romans, India was the epitome of exoticism, as the descriptions of ancient geographers, encyclopaedists, and story-tellers make it clear.[48] The epithet 'Indian' attached to a recipe did not necessarily imply that the remedy as a whole was produced in India. Already in the fourth century BCE, there worked at Athens a drug-seller who called himself 'the Indian' (Theophrastus *HP* 9.18.9). Whether this trader was really Indian, or of Indian ancestry, or whether he had travelled to far-away lands, or whether he simply used that name to promote his drugs, we do not know.

Galen records another 'Indian' recipe, the royal Indian remedy:

> The so-called royal Indian remedy; it works against incipient cataracts and any dim-sightedness; it is smeared on scars: burnt and cleansed calamine (*kadmeias*), 1 *litra* and 4 ounces; Indian dark pigment ('*melanos*,' i.e., indigo), 6 *dr.*; *psimythion*, 4 ounces; white

> pepper, 6 ounces; hyena's bile, as much as the entirety (?), parrot's bile, 10 ounces; partridge's bile, 4 ounces; juice of opium poppy, 1 ounce; opobalsamum, 3 ounces; opopanax, 2 ounces; *sagapenon*, 2 ounces; gum, 1 *litra*; mix these ingredients with the juice of fennel or of the so-called herb Heracleia. (Galen, *De Compositione Medicamentorum secundum Locos* 4.8; 12.781–2 Kühn)

Like the 'blue Indian remedy', the 'royal Indian remedy' included indigo, pepper, and opobalsamum. It also included *sagapenon*, that is, the juice of a plant (*Ferula persica* Willd.) growing in Media according to Dioscorides (*Materia Medica* 3.81). What most distinguishes this recipe from the previous one, however, is the presence of three animal products (hyena's bile, parrot's bile, and partridge's bile).[49]

Once again the 'Indian' epithet emphasized the exoticism of many ingredients included in the remedy. But what made this remedy 'royal'? First, there is cost: exotic ingredients tend to be expensive because they have to be transported over long distances. Second, opobalsamum had 'royal' connotations: Pliny tells us that balsam only grew in two gardens, both belonging to the king of Judaea (*HN* 12.111–13). Third, keeping exotic animals, from which fresh bile could be extracted, was the preserve of the extremely rich in the ancient world. Those wealthy people usually were close to royal power or were of royal lineage themselves.[50] Finally, this recipe may have been qualified as 'royal' because it had been consumed and/or offered to an unnamed king. For the practice of offering remedies to royal figures was common in the Graeco-Roman world. I end this chapter with further examples of antidotes offered to royal figures in antiquity.

Compound antidotes do not appear in the earliest medical literature. They seem to have been an 'invention' of the Hellenistic period, and gained increasing popularity in the first centuries of the Roman Empire. Antidotes were first designed to protect against poisons and venoms, but they soon became panaceas to heal all matters of ailments. As in the case of theriac, which was created by the physician to Nero and consumed by Marcus Aurelius, there is often a connection between an antidote and a royal figure. There are numerous examples, but I have chosen to focus on the antidotes of Zopyrus and Aelius Gellus.

Zopyrus of Alexandria, one of the most famous Empiricists of his times is reported to have compounded an ambrosia for a certain Ptolemy. It is difficult to establish which Ptolemy this is (although Ptolemy XII Auletes is the most likely contender),[51] and even more difficult to know whether the king used it. However, with its promise of immortality—ambrosia was the food of the gods, which guaranteed their immortality—this recipe was the perfect present for a ruler.[52] The recipe preserved by Celsus (first century CE), which may or may not be the original recipe created by Zopyrus, contains two local specialties: Cilician saffron and Indian nard. Of the seven other ingredients it lists, six came from beyond the boundaries of the Hellenistic world. From India came costus and pepper; from Arabia, myrrh and frankincense; and cassia and cinnamon came from even further east.[53] To be able to prepare such a recipe, one needed to have access to good stocks of ingredients. There were relatively few places in the ancient world where all these products could easily all be found. One such place was, of course, Alexandria, the capital of the Ptolemies. The ambrosia Zopyrus offered to the king was a subtle reminder of the Ptolemies' mercantile power.[54] There is more, however, at stake here than commerce. Zopyrus' antidote represents a 'melting pot' of 'ethnic' products, blending together to guarantee the immortality of the king, and through the king, the immortality of his kingdom and empire. With products travelled people, and at Alexandria, people from all corners of the earth would have come together, especially in mercantile areas. Zopyrus' ambrosia is a microcosm of the relatively peaceful world that was the Ptolemaic kingdom in the first century BCE.

It is important, however, not to lose sight of the primary purpose of antidotes: to protect against poisoning. Poisoning and dynastic murders were not uncommon in the Hellenistic period, a period of constantly shifting alliances between kingdoms, and a time when Rome grew beyond all recognition through its military conquests.[55] In this context, it is interesting to note that Zopyrus also presented an antidote against poisons and the bite of any snake to King Mithradates VI of Pontus.[56] Mithradates was one of the most fearsome enemies of Rome, and his relations with the Ptolemies were unstable.[57] Mithradates was himself known for dabbling in antidote preparation, and had contacts with various medical authorities of the time. According to Galen (whose source was Apollonios Mys), Zopyrus sent to Mithradates his antidote by letter (we do not know whether he sent the recipe or the medication itself, or both), enjoining him to use it on a man condemned to death, making him take first a poisonous drug, then the antidote, or the antidote first and then the drug. The king apparently followed these instructions, and the man remained unharmed.[58] The recipe recorded by Galen is rather similar to that of the ambrosia we have just observed: it is an accumulation of exotic products and local specialties, some of which are accompanied by a geographical epithet: balsam, Indian nard, Troglodytic myrrh, cinnamon, costus, pepper, Cretan spignel, cardamom, frankincense, cassia, Corycian saffron, and Attic honey. Presuming Zopyrus sent this antidote from Alexandria, one can imagine the miles that were necessary for the ingredients to travel from their place of origin to Egypt, and thence to the court of Mithradates at Sinope. This recipe reflects the commercial currents going through the Mediterranean and the rest of the known world at the time.[59] It may also have played a sort of 'diplomatic role' in the relations between the Ptolemaic kingdom, where Zopyrus was based, and the kingdom of Mithradates.

Another example of an antidote recipe offered to a ruler is the recipe allegedly offered by Aelius Gallus to Augustus on his return from Arabia. At the end of the first century BCE (26–25 BCE), Augustus sent an expedition to Arabia Felix, to be led by the prefect of Egypt, Aelius Gallus.[60] The expedition was dangerous, and members of the army became ill with a drying disease, as reported by Dio Cassius (53.29.3–5). The army also had to deal with the dangers of snakes and other wild animals. It is against that danger that the antidote is designed, two versions of which are preserved by Galen (see Table 9.3).[61]

Version A contains the exotic ginger, as well as Ethiopian cumin and Chian wine. Version B is rather grander: it contains the quintessentially Arabian ingredient myrrh, to which are added the exotic ginger and costus, as well as several ingredients qualified geographically: Carthaginian iris, Ethiopian cumin, and Cyrenaic juice (the juice of silphium, an umbelliferous plant from Libya, which was almost extinct by the time of Pliny).[62] At the end of the first century BCE, Rome was starting to become as important a pharmacological trading centre as Alexandria, and was therefore one of the rare places in the ancient world where all these exotic ingredients could be found.[63] The expedition to Arabia might have failed, but by making this gift to Augustus, Aelius Gallus would have been able to remind the emperor that he was still the most powerful on earth. The epithets 'Carthaginian' and 'Cyrenaic' in Version B would also have been politically meaningful at the end of the first century BCE. In the forties BCE, Julius Caesar had started the building of a New Carthage, which in 27 BCE became the capital of Africa Proconsularis. Cyrenaica, for its part, became a senatorial province in 20 BCE.

A pharmacological gift to a royal figure then works at various levels. First, as a written recipe, it catalogues products from conquered lands, from lands to be conquered, and from lands beyond the reach of conquest, but with which peaceful commerce should be possible. That remedy was then a microcosm of the world. Second, as a remedy it protected the health of the ruler—a healthy king symbolizes a healthy kingdom. When he was given his antidote

Table 9.3 Two versions of Aelius Gallus' theriac recipes, from Galen's *De Antidotis*

Version A: Galen, De Antidotis 2.17 (14.203 Kühn)	*Version B: Galen, De Antidotis 2.14 (14.189–90 Kühn)*
Another theriac antidote scorpion stings and any other bite . . . [Aelius] Gallus, having marched out of Arabia, gave this [antidote] to Caesar [sc. Augustus], having saved with it many of his expedition fellows: root of white bryony, 8 dr.; seed of clover, 4 dr.; iris; copper ore, of each 4 dr.; birthwort, 4 dr.; root of rosemary frankincense, 4 dr.; juice of opium, 4 dr.; ginger, 4 dr.; seed of wild rue, 6 dr.; tufted thyme, 3 dr.; Ethiopian cumin, 3 dr.; root of eryngo, 3 dr.; white flour of vetch, 10 dr.; Chian wine not mixed with sea-water, sufficient amount; make pastilles, each of one drachma, and give with a kotyle of unmixed wine.	Theriac antidote against viper bites, it also works against the bite of any snake. [Aelius] Gallus, having marched out of Arabia, gave this [antidote] to Caesar [sc. Augustus], having saved with it many of his expedition fellows from the bite of rabid dogs, scorpions, venomous spiders, and other creeping animals. It contains the following: bitter vetch meal, 25 dr.; root of bryony, 16 dr.; seed of wild rue, 12 dr.; clover seed; Carthaginian iris; opopanax, birthwort; opium poppy juice; ginger, each 8 dr.; Ethiopian cumin; myrrh; eryngo; Cyrenaic juice [sc. juice of silphium]; saffron; wild thyme; costus; *sagapenon*, of each 6 dr.; knead with Aminean wine, mould lozenges, and give according to the strength [of the patient].

to strengthen his health, the king/emperor was offered the world to ingest. This is no doubt a gesture that is highly charged from a symbolic point of view. It could be interpreted in a varieties of ways: as a form of 'cannibalism', where the emperor swallows his empire; as a way for the emperor to become one with his empire; as a way for the emperor to show his dominion over the world. However, since we only have the testimony of the medical sources, and not the testimonies of the kings/emperors who consumed these drugs, it is impossible to give definite answers. At a more prosaic level, the pharmacologist who had created a successful 'royal' remedy could hope to make much profit. Beyond the emperor or king, there was a large market to be tapped into: elites who wanted to spend good money on emulating the emperor. As we saw earlier, these elites were sometimes fooled into buying counterfeited goods. While this may have bothered Galen and his peers, I doubt medical consumers were that preoccupied: theirs was an act of competitive consumption rather than a real attempt at getting the health benefits of the rarest and most expensive drugs.

Conclusions

Lin Foxhall has argued that 'local specialties' played an important role in defining elite identity in the archaic Greek world. In this chapter, I have suggested that Foxhall's framework can be applied to the study of ancient pharmacology. There, local specialties figure very prominently. While not all geographically qualified products can be defined as 'luxuries', it is clear that geographical epithets played an important symbolic function in ancient pharmacological texts. They drew the attention of the reader to lands that were reputed for their excellent produce and, in some cases, for their medical practice. Our earliest pharmacological texts, the recipes of the Hippocratic Corpus, contain a non-negligible amount of local specialties, but that number pales into comparison to that found in the recipes of the Galenic Corpus. In the time that separated the two corpora, the Graeco-Roman world expanded beyond recognition. The

small-scale Greek *poleis* survived, but were absorbed into immense kingdoms and empires. At the head of these political entities were kings and emperors who, ultimately, controlled the trade in the most lucrative products or levied taxes on them. They had a vested interest in mapping these products. Recipes, and especially long antidote recipes, did just that: cataloguing goods and placing them under the patronage of a royal figure. They also promised immortality and general good health. We will probably never know whether Marcus Aurelius really took a daily dose of theriac (he certainly does not tell us so in his *Meditations*), but that Galen chose to stress that daily consumption is significant. This drug was a microcosm of the empire, to be consumed by the emperor, whose healthy body guaranteed the good functioning of the empire. It required careful preparation that could, according to Galen, only be entrusted to the most competent physicians.

Notes

1 Unless stated otherwise, all translations are mine. It is customary to give a reference to the modern editor of ancient medical texts. For instance, in the reference *De Antidotis* 1.6 (14.32–42 Kühn), 'Kühn' refers to the edition by Karl Gottlob Kühn 1821–33; '14' refers to the volume; '32–42' refers to the pages in that volume. I have left Latin titles of ancient medical texts in full to facilitate reading.
2 Servilius Damocrates was active under the rules of emperors Nero and Vespasian.
3 Andromachus' poem is transmitted by Galen in *De Antidotis* 1.6 (14.32–42 Kühn) and in *De Theriaca ad Pisonem* 6–7 (14.233 Kühn). Note, however, that Kühn did not reprint the poem in his edition of *Theriaca ad Pisonem*. For a better edition of the poem, see Heitsch 1964: 7–15. The prose version by Andromachus the Younger is at *De Antidotis* 1.7 (14.42–4 Kühn). The verse version of Damocrates is at *De Antidotis* a.15 (14.90–99 Kühn). There is much literature on theriac. See in particular Watson 1966; Stein 1997; Boudon 2002. On recipes in verse, see the bibliography in Totelin 2012. On the short treatises on theriac and the question of authenticity, see Coturri 1959; Nutton 1997; Leigh 2013. For information on all pharmacological authorities named in this chapter, see the relevant articles in Keiser and Irby-Massie 2008; see also Fabricius 1972. For a general introduction to ancient medicine, see Nutton 2012.
4 Galen, *De Antidotis* 1.1 and 1.4 (14.3–5 and 24 Kühn). See also Dio Cassius 72.6.3–4. Africa (1961) believed the Roman Emperor was addicted to opium contained in Theriac. For a refutation of this hypothesis, see Hadot 1984. See also Whitke 1965; Watson 1966, 87; Scarborough 1995, 17–18.
5 On the tricks of the pharmacological trade in the ancient world, see Nutton 1985; Boudon-Millet 2003.
6 Pliny regularly complains about the negative impact of Greek medicine on Roman healing. The short passage quoted is part of a long diatribe against Greek medicine (*HN* 29.11–28). On Pliny's attitude towards Greek medicine, see Nutton 1993; von Staden 1996. On Pliny's conception of nature, see Beagon 1992.
7 Jones-Lewis 2012 argues convincingly that some regions are strongly associated with poisons in the work of Pliny: Greece, North Africa, Egypt and Pontus. Italy in some ways is an 'antidote' to all these poisons.
8 The identifications of ingredients are those of Beck in her translation of Dioscorides (2005). It is difficult to identify ingredients listed in ancient recipes, but while certainty will never be achieved, the situation is not as bleak as some scholars think it is.
9 Flemming 2007, 256–7.
10 The literature on knowledge and empire is large. For an excellent introduction to the issues in the ancient world, see König and Whitmarsh 2007 (with references to the work of Edward Said).
11 Ancient historians often hesitate to talk about consumption, and even more so about consumerism. See, however, Greene 2008. On the drug trade in antiquity, see Schmidt 1924 and Nutton 1985.
12 Appadurai 1986, 38. On the notion of luxury, see also the study by Berry 1994. For works on the ancient world more specifically, see, e.g. Dalby 2000; van der Veen 2003.
13 For an introduction to the notion of ethnicity in the ancient Greek world, see Hall 1997.
14 See also Dalby 2003, 198–9 (s.v. local specialities); Hall 2012, 273.
15 See Totelin 2009, chapter 4.

16 Flemming 2003, 458. On the links between Theophrastus and the expeditions of Alexander, see Bretzl 1903; Amigues 1996.
17 On the recipe books of the Hellenistic period, see Fabricius 1972; von Staden 1989.
18 What I have translated earlier as 'spikenard' in the phrase 'Pontic spikenard' is *phou* rather than *nardos*.
19 The ancient and modern notions of plant species differ; see Hardy and Totelin 2015, chapter 3.
20 See notes by Amigues *ad loc*.
21 On whether garlic from Tenos is an invention or not, see Totelin 2015. The Latin authors Cato (*RR* 8.2), Pliny (*HN*, 19.93; 20.105) Ovid (*A.A.* 2.422), and Columella (*RR* 10.106) refer to the Megarian '*bulbus*'. Columella, Pliny and Ovid mention the aphrodisiac properties of this bulb, which has been identified by Jacques André with *Muscari comosum Mill.*, called *bolbos* in Greek. Perhaps this Megarian bulb is the same as the Megarian garlic? On the garlic from Tlos and the garlic from the Oasis, see Crawford 1973.
22 See Dalby 2003, 6 (s.v. almond) and 173 (s.v. hazelnut). See below in note 58 for an example of a medication dose measured in Pontic nuts.
23 Identification Dalby 2003, 199–200 and 109.
24 See, for instance, Isocrates, *Busiris* 22; [Galen], *Isagoge sive medicus*, especially 1–2 (14.675–676 Kühn); Clement of Alexandria, *Stromata* 1.16.75. See also *Odyssey* 4.227–32. On the image of Egyptian medicine in Greece, see, e.g. Marganne 1992; 1993; Jouanna 2004; Totelin 2009; 155–6; Lang 2013.
25 For an ethnobotanical study of dittany, see Liolios *et al*. 2010.
26 On the image of India in the Roman world, see, e.g. Parker 2008. On Crete as a land rich in *pharmaka*, see Rouanet-Liesenfelt 1992. See also Moody 2012, especially 252–3.
27 Dioscorides devotes three chapters to 'nards': one to Indian/Syrian nard (*Mat. Med.* 1.7), one to Celtic nard (1.8), and one to Mountain nard (1.9).
28 The identifications of plants offered these are those of Lily Beck in her translation of Dioscorides (2005).
29 On the etymology of Greek plant names, see Carnoy 1959.
30 Dioscorides lists even more local varieties of earth: Chian, Cimolian, Eretrian, Lemnian, Melian, Sinopic, Samian, and from Selinus.
31 The literature on Lemnian earth is extensive. See, for instance, Berthelot 1895; Hasluck 1909; Hasluck and Hasluck 1929; Marganne 1997, 158–64; Jaronowski 2008. Hall and Photos-Jones (2008) have attempted to determine the chemical composition of the earth.
32 The passage runs from page 12.169 to 12.175 in Kühn's edition and contains more explanations on how the priestess made the seals by mixing it with the local water. Philostratus, *Heroicus* 28.5 gives an etiological myth for the properties of the earth: Hephaistos fell into it. Brock provides a translation of the entire passage (1929, 193–7).
33 Nutton 1985, 144; Krug 1985, 109; Marganne 1997, 155. See also Cruse 2004: 166–70.
34 For the question of local wines and their amphorae, see, e.g. Dalby 2005.
35 See Simpson 1856; Sjöqvist 1960; Hershkovitz 1986; Taborelli 1982; Taborelli and Marengo 2010; Rotroff 1997, 198.
36 Dioscorides, *Materia Medica* presents both the plant *lykion* which grows in Cappadocia and Lycia (hence its name) and the Indian *lykion*. See also Galen, *De Simpl.* 7.20 (12.63–4 Kühn); Pliny, *HN* 12.30.
37 Apollonius *ap.* Athenaeus, *Deipnosophistae* 15.688e.
38 On Mendes, its history and perfumes, see Redford 2001, 2004, 2010; Blouin 2011.
39 Redford 2010; 173–6. For archaeological remains of such centers at Delos and Paestum, see Brun 2000.
40 Strattis *ap.* Athenaeus, *Deinosophistae* 15.690f = fr. 34 Kassel & Austin.
41 Theophrastus, *De Odoribus* 30; Achaeus *ap.* Athenaeus, *Deipnosophistae* 15.689c (Achaeus was a tragedian of the fifth century BCE); Anaxandrides *ap.* Athenaeus 15.689f = fr. 41 Kassel & Austin (Anaxandrides was a comedian of the fourth century BCE).
42 On Egyptian perfumes, see Manniche 1999.
43 [Hippocratic Corpus], *De Muliebribus* 2.185 (8.366 Littré); *De Ulceribus* 16 (64–5 Duminil; 6.418–20 Littré). For a translation of these recipes, see Totelin 2009, 178.
44 Indian collyrium and Indian royal remedy: see below. Egyptian 'grey' plaster: *De Compositione Medicamentorum per Genera* 6.8 (13.890–91 Kühn); Egyptian remedy of the surgeon Claudius Philoxenus: *De Compositione Medicamentorum per Genera* 3.9 (13.645 Kühn). Cyzican plaster: see, for instance, *De Compositione Medicamentorum per Genera* 4.13 (13.742 Kühn). Pontic remedy, *De Compositione Medicamentorum secundum Locos* 7.4 (13.83 Kühn).
45 Hereafter abbreviated "dr.".

46 On colours in antiquity, see Bradley 2009. Blue colours, however, are not studied in detail in this work.
47 On the identification of ancient cinnamon, see De Romanis 1996 and review by Marganne 1996.
48 There are numerous descriptions of ancient India: see, for instance, the fragments of Ctesias; Pliny the Elder, *HN* book 6; Arrian's *Indica*; Philostratus' *Life of Apollonius*.
49 Pepper is qualified as 'Indian pepper' in several texts.
50 Although the word 'zoo' is not appropriate for the ancient world, see Hubbell 1935.
51 See Stok 2008.
52 On the name ambrosia, see Marasco 1996, 458; Massar 2005, 237. On the naming of antidotes in the ancient world, see Skoda 2001.
53 Celsus, *De Medicina* 5.23.2: Another [antidote], which Zopyrus is said to have composed for King Ptolemy and which he called 'ambrosia'. It contains the following: costus, male frankincense, of each 1/3 of a *denarius*; white pepper, 1/4 of a *denarius*; flowers of round reed, 2 *denarii*; cinnamon, 3 *denarii*; black cassia, 4 *denarii*; Cilician saffron, 4 *denarii* and 1 obol; myrrh, which is called 'stacte', 5 *denarii*; Indian nard, 5 and 1/4 *denarii*. Each ingredient is crushed separately and mixed to boiled honey. Then, at the time of use, an amount of an Egyptian bean should be taken in a draught of wine. Galen gives a very similar recipe called '*zopyrion*' at *De Antidotis* 2.17 (14.204–5 Kühn), but does not mention Ptolemy.
54 On Alexandria in the Ptolemaic era, see Fraser 1972.
55 See Jones-Lewis 2012.
56 On Mithradates and antidotes, in addition to Watson 1966, see Totelin 2004; Mayor 2010.
57 See McGing 1986 on Mithridatic diplomacy.
58 Galen, *De Antidotis* 2.8 (14.150 Kühn): Antidote of Zopyrus. It works against lethal poisons and the sting of any reptile. Concerning this, the following story is told: by letter Zopyrus encouraged Mithradates to test his antidote, and it encouraged him, after having sent for one man condemned to death, to give him a lethal drug, and then to make him drink the antidote; or to give him the antidote first, and then to drink the lethal drug. And he made the same recommendation regarding reptiles and poisoned arrows. For as these things occurred, the man became infallible (*adiaptōton*) . . . It is prepared in the following way: opobalsamum, 4 dr.; Indian nard; Troglodytic (*Trōglodutidos*) myrrh; flower of rush; blades of cinnamon (*kinnamōmou charakiou*); fresh costus; long pepper; hypocist; hulwort; foreign pepper (*pepereōs pereatikou*); garlic germander; Cretan spignel, cardamom, of each 4 dr.; male frankincense; opobalsamum in grains; dittany, of each 6 dr.; parsley; tawny cassia, of each 7 dr.; Corycian saffron, 8 dr.; Attic honey, sufficient amount. Give in the amount of a Pontic nut; to those who are not feverish with wine; to those who are feverish with hydromel.
59 Massar makes this point about recipes in general (2005, 223) and Komorowska, this volume.
60 On the expedition, see Jameson 1968; Sidebotham 1986; Simon 2002.
61 Watson (1966, 16) believes Version A and B are in fact two different recipes offered by Aelius to Augustus, but it is more likely that none of these versions is the original recipe of Aelius—that this original recipe is irrecoverable. It should be noted that a similar recipe is found in Scribonius Largus, *Compositions* 165: it is a Theriac against all serpents, but there the name of Aelius is not mentioned.
62 On the possible extinction of silphium, see Pliny *HN* 19.39.
63 See Holleran 2012: 127–9.

Bibliography

Africa, Thomas 1961. "The Opium Addiction of Marcus Aurelius." *Journal of the History of Ideas* 22: 97–102.

Amigues, Suzanne 1996. "L'expédition d'Anaxicrate en Arabie Occidentale." *Topoi Orient-Occident* 6: 671–7.

Appadurai, Arjun 1986. "Introduction: Commodities and the Politics of Value." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by Arjun Appadurai, 3–63. Cambridge: Cambridge University Press.

Beagon, Mary. 1992. *Roman Nature: The Thought of Pliny the Elder*. Oxford: Clarendon Press.

Beck, Lily Y. 2005. *Pedanius Dioscorides of Anazarbus: De Materia Medica*. Hildesheim, Germany: Olms-Weidmann.

Berry, Christopher J. 1994. *The Idea of Luxury: A Conceptual and Historical Investigation*. Cambridge: Cambridge University Press.

Berthelot, M. 1895. "Sur les Voyages de Galien et de Zosime dans l'Archipel et en Asie et sur la Matière Médicale dans l'Antiquité." *Journal des Savants* 382–7.

Blouin, Katherine 2011. "Les Jumelles non Identiques: Mendès et Thmouis aux Epoques Hellénistique et Romaine." In *The Space of the City in Graeco-Roman Egypt Image and Reality*, edited by E. Subías, P. Azara, J. Carruesco, I. Fiz and R. Cuesta, 57–68. Tarragona: Institut Català d'Arqueologia Clàssica.

Boudon-Millet, Véronique. 2003. "Aux Marges de la Médecine Rationnelle: Médecins et Charlatans a Rome au Temps de Galien (IIe s. de notre ère)." *Revue des Etudes Grecques* 116: 109–31.

——. 2002. "La Thériaque Selon Galien: Poison Salutaire Ou Remède Empoisonné." In *Le Corps à l'Epreuve. Poisons, Remèdes et Chirurgie: Aspects des Pratiques Médicales dans l'Antiquité et au Moyen Âge*, edited by F. Collard and E. Samama, 45–56. Langres: D. Guéniot.

Bradley, Mark 2009. *Colours and Meaning in Ancient Rome*. Cambridge: Cambridge University Press.

Bretzl, Hugo 1903. *Botanische Forschungen des Alexanderzuges*. Leipzig, Teubner.

Brock, Arthur J. 1929. *Greek Medicine Being Extracts Illustrative of Medical Writers from Hippocrates to Galen*. London and Toronto: J.M. Dent and Sons.

Brun, Jean-Pierre 2000. "The Production of Perfumes in Antiquity: The Cases of Delos and Paestum." *American Journal of Archaeology* 104: 277–308.

Carnoy, Albert Joseph. 1959. *Dictionnaire Etymologique des Noms Grecs de Plantes*. Louvain: Publications Universitaires.

Coturri, Enrico. 1959. "Perche il 'De Usu Theriacae ad Pamphilanum' non e da Ritenersi Opera di Galeno." *Galeno* 4.

Crawford, Dorothy 1973. "Garlic-Growing and Agricultural Specialization in Graeco-Roman Egypt." *Chronique d'Egypte* 48: 350–63.

Cruse, Audrey. 2004. *Roman Medicine*. Stroud: Tempus.

Dalby, Andrew. 2000. *Empire of Pleasures: Luxury and Indulgence in the Roman World*. London and New York: Routledge.

——. 2003. *Food in the Ancient World from A to Z*. London and New York: Routledge.

——. 2005. "*Topikos oinos*: The Named Wines of Old Comedy. "In *The Rivals of Aristophanes. Studies in Athenian Old Comedy*, edited by D. Harvey and J. Wilkins, 39–405. London and Swansea: Duckworth and the Classical Press of Wales.

De Romanis, F. 1996. *Cassia, cinnamomo, ossidiana. Uomini e mercanti tra oceano indiano e Mediterraneo*. Rome: L'Erma di Bretschneider.

Duminil, Marie-Pierre. 1998. *Hippocrate. Tome VIII. Plaies. Nature des os. Coeur. Anatomie. Texte établi et traduit par M.-P. Duminil*. Paris: Les Belles-Lettres.

Fabricius, Cajus. 1972. *Galens Exzerpte aus älteren Pharmakologen*. Berlin and New York: Walter de Gruyter.

Flemming, Rebecca. 2003. "Empires of Knowledge: Medicine and Health in the Hellenistic World." In *A Companion to the Hellenistic World*, edited by A. Erskine, 449–63. Malden, MA and Oxford: Wiley-Blackwell.

——. 2007. "Galen's Imperial Order of Knowledge." In *Ordering Knowledge in the Roman Empire*, edited by J. König and T. Whitmarsh, 241–77. Cambridge: Cambridge University Press.

Foxhall, Lin. 1998. "Cargoes of the Heart's Desire: The Character of Trade in the Archaic Mediterranean World." In *Archaic Greece: New Approaches and New Evidence*, edited by N. Fisher and H. van Wees, 295–309. London: Duckworth.

——. 2005. "Village to City: Staples and Luxuries? Exchange Networks and Urbanization." In *Mediterranean Urbanization 800–600 BC*, edited by R. Osborne and B. Cunliffe, 233–48. Oxford: Oxford University Press.

Fraser, Peter. M. 1972. *Ptolemaic Alexandria*. Oxford: Clarendon Press.

Greene, Kevin. 2008. "Learning to Consume: Consumption and Consumerism in the Roman Empire." *Journal of Roman Archaeology* 21: 19.

Hadot, Pierre. 1984. "Marc Aurèle Etait-Il Opiomane?" In *Mémorial André-Jean Festugière. Antiquitè Païenne et Chrétienne*, edited by E. Luchesi and H.D. Saffrey, 35–50. Geneva: P. Cramer.

Hall, Allan and Effie Photos-Jones. 2008. "Accessing Past Beliefs and Practices: The Case of Lemnian Earth." *Archaeometry* 50: 1034–49.

Hall, Jonathan M. 1997. *Ethnic Identity in Greek Antiquity*. Cambridge: Cambridge University Press.

——. 2012. *A History of the Archaic Greek World, ca. 1200–479 BCE*, 2nd edition. Malden, MA and Oxford: Wiley Blackwell.

Hardy, Gavin and Laurence Totelin. 2015. *Ancient Botany*. London: Routledge.
Hasluck, Frederik William. 1909–10. "Terra Lemnia." *Annual of the British School at Athens* 16: 220–31.
—— and Margaret Hasluck. 1929. "Terra Lemnia." *Annual of the British School at Athens* 30: 671–88.
Heitsch, E. 1964. *Die Griechischen Dichterfragmente der Römischen Kaiserzeit. Band 2*. Gottingen: Vandenhoeck and Ruprecht.
Hershkovitz, Malka. 1986. "Miniature Ointment Vases from the Second Temple Period." *Israel Exploration Journal* 36: 45–51.
Holleran, Claire. 2012. *Shopping in Ancient Rome: The Retail Trade in the Late Republic and the Principate*. Oxford: Oxford University Press.
Hubbell, H.M. 1935. "Ptolemy's Zoo." *Classical Journal* 31: 68–76.
Jameson, Shelagh. 1968. "Chronology of the Campaigns of Aelius Gallus and C. Petronius." *Journal of Roman Studies* 58: 71–84.
Jaronowski, Henryk. 2008. "'An Earth by any other Name': Pre-Ottoman Sources and Names for Lemnian Earth." *Ellhnika* 58: 47–70.
Jones-Lewis, Molly Ayn. 2012. "Poison: Nature's Argument for the Roman Empire in Pliny the Elder's *Naturalis Historia*." *Classical World* 106: 51–74.
Jouanna, Jacques 2004. "Médecine égyptienne et médecine grecque." In La Médecine *Grecque Antique. Actes du 14e Colloque de la Villa Kérylos à Beaulieu-sur-Mer les 1er et 2 Octobre 1999, Paris*, edited by J. Jouanna and J. Leclant, 1–21. Paris: Académie des inscriptions et belles-lettres.
Keyser, Paul. T. and Irby-Massie, Georgia. eds. 2008. *The Encyclopedia of Ancient Natural Scientists: The Greek Tradition and Its Many Heirs*. London and New York: Routledge.
König, Jason and Whitmarsh, Tim. eds. 2007. *Ordering Knowledge in the Roman Empire*. Cambridge: Cambridge University Press.
Krug, Antje. 1985. *Heilkunst und Heilkult: Medizin in der Antike*. Munich: Beck Verlag.
Kühn, Karl G. 1821–33. *Claudii Galeni opera omnia* (Vol. 20). Berlin and Leipzig: Libraria Car. Cnoblochii.
Lang, P. 2013. *Medicine and Society in Ptolemaic Egypt*. Leiden: Brill.
Leigh, Robert A. 2013. *On Theriac to Piso, Attributed to Galen*. PhD, University of Exeter.
Liolios, Christos C., K. Graikou, E. Skaltsa and I. Chinou. 2010. "Dittany of Crete: A Botanical and Ethnopharmacological Review." *Journal of Ethnopharmacology* 131: 229–41.
Littré, Émile. 1839–61. *Oeuvres complètes d'Hipocrate*. 10 volumes. Paris.
Manniche, Lise. 1999. *Sacred Luxuries. Fragrance, Aromatherapy and Cosmetics in Ancient Egypt*. London: Opus.
Marasco, Gabriele. 1996. "Les Médecins de Cour à l'Epoque Hellénistique." *Revue des Etudes Grecques* 109: 435–66.
Marganne, Marie-Hélène. 1992. "Les Références à l'Egypte dans la Matière Médicale de Dioscoride." In *Serta Leodiensia Secunda. Mélanges Publiés par les Classiques de Liège à l'Occasion du 175e Anniversaire de l'Université*, 309–22. Liège: Centre Informatique de Philosophie et Lettres, Université de Liège.
——. 1993. "Links between Egyptian and Greek Medicine." *Forum* 3: 35–43.
——. 1996. "Un cinnamone fantomatique." *Topoi* 6: 657–64.
——. 1997. "Les médicaments éstampillés dans le corpus galénique." In *Galen on Pharmacology: Philosophy, History and Medicine. Proceedings of the Vth International Galen Colloquium, Lille, 16–18 March 1995*, edited by Armelle Debru, 153–73. Leiden: Brill.
Massar, Natacha. 2005. *Soigner et Servir: Histoire Sociale et Culturelle de la Médecine Grecque à l'Epoque Hellénistique*. Paris: De Boccard.
Mayor, Adrienne. 2010. *The Poison King: The Life and Legend of Mithradates, Rome's Deadliest Enemy*. Princeton, NJ and Oxford: Princeton University Press.
McGing, Brian. 1986. *The Foreign Policy of Mirthidates VI Eupator, King of Pontus*. Leiden: Brill.
Moody, Jennifer. 2012. "Hinterlands and Hinterseas: Resources and Production Zones in Bronze Age and Iron Age Crete." In *Parallel Lives: Ancient Island Societies in Crete and Cyprus*, edited by G. Cadogan, K. Kopaka and M. Iacovou, 233–71. London: British School at Athens Studies, 20.
Murphy, Trevor. 2004. *Pliny the Elder's Natural History: The Empire in the Encyclopedia*. Oxford: Oxford University Press.

Nutton, Vivian. 1985. "The Drug Trade in Antiquity." *Journal of the Royal Society of Medicine* 78: 138–45.
——. 1993. "Roman Medicine: Tradition, Confrontation, Assimilation." In *Aufstieg und Niedergang der Römischen Welt. Teil II. Principat. Band 37.1,* edited by W. Haase & H. Temporini, 49–78. Berlin and New York: De Gruyter.
——. 1997. "Galen on Theriac: Problems of Authenticity." In *Galen on Pharmacology: Philosophy, History and Medicine. Proceedings of the Vth International Galen Colloquium, Lille, 16–18 March 1995*, edited by Armelle Debru, 133–52. Leiden, Brill.
——. 2013. *Ancient Medicine*. 2nd edition. London: Routledge.
Parker, Grant. 2008. *The Making of Roman India. Greek Culture in the Roman World*. Cambridge: Cambridge University Press.
Redford, Donald B. 2001. "Mendes." In *The Oxford Encyclopedia of Ancient Egypt*, edited by D.B. Redford, 376–7. Oxford, New York and Cairo: Oxford University Press and The American University in Cairo Press.
——. 2004. *Excavations at Mendes: The Royal Necropolis*. Brill: Leiden
——. 2010. *City of the Ram-man: The Story of Ancient Mendes*. Princeton, NJ: Princeton University Press.
Rotroff, Susan I. 1997. *Hellenistic Pottery: Athenian and Imported Wheelmade Table Ware and Related Material*. Princeton, NJ: ASCSA.
Rouanet-Liesenfelt, A.M. 1992. "Les Plantes Médicinales de Crète à l'Epoque Romaine." *Cretan Studies* 3: 173–89.
Scarborough, John. 1995. "The Opium Poppy in Hellenistic and Roman Medicine." In *Drugs and Narcotics in History*, edited by R. Porter and M. Teich, 4–23. Cambridge: Cambridge University Press.
Schmidt, Alfred 1924. *Drogen und Drogenhandel im Altertum*. Leipzig.
Sidebotham, Steven E. 1986. "Aelius Gallus and Arabia." *Latomus* 45: 590–602.
Simon, Robert 2002. "Aelius Gallus' Campaign and the Arab Trade in the Augustan Age." *Acta Orientalia Academiae Scientiarum Hungaricae* 55(4): 309–18.
Simpson, James Y. 1856. *Notes on Some Ancient Greek Medical Vases for Containing Lykion: And on the Modern Use of the Same Drug in India*. Sutherland and Knox.
Sjöqvist, Erik 1960. "Morgantina: Hellenistic Medicine Bottles." *American Journal of Archaeology*, 78–83.
Skoda, Françoise 2001. "Désignations de l'Antidote en Grec Ancien." In *Docente Natura: Mélanges de Médecine Ancienne et Médiévale Offerts à Guy Sabbah*, edited by A. Debru and N. Palmieri, 273–91. St-Etienne: Publications de l'Université de Saint-Ètienne.
Stein, Michael. 1997. "La Thériaque chez Galien: Sa Préparation et son usage Thérapeutique." In *Galen on Pharmacology: Philosophy, History and Medicine. Proceedings of the Vth International Galen Colloquium, Lille, 16–18 March 1995*, edited by Armelle Debru, 199–209. Leiden: Brill.
Stok, Fabio. 2008. "Zōpuros of Alexandria." In *The Encyclopedia of Ancient Natural Scientists. The Greek Tradition and Its Many Heirs*, edited by Paul. T. Keyser and Georgia L. Irby-Massie, 851. London: Routledge.
Taborelli, Luigi. 1982. "Vasi di Vetro con Bollo Monetale (Note Sulla Produzione E Il Commercio Degli Unguenti Aromatici Nella Prima Età Imperiale)." *Opus* 1: 315–40.
Taborelli, Luigi and Silvia Marengo. 2010. "Microcontenitori per Medicamenta di Epoca Ellenistica e Romana." *Archeologia Classica: Rivista del Dipartimento di Scienze Storiche Archeologiche e Antropologiche dell'Antichità* 61: 211–42.
Totelin, Laurence M.V. 2004. "Mithradates' Antidote: A Pharmacological Ghost." *Early Science and Medicine* 9: 1–19.
——. 2009. *Hippocratic Recipes: Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece.* Leiden: Brill.
——. 2012. "And to End on a Poetic Note: Galen's Authorial Strategies in the Pharmacological Books." *Studies in History and Philosophy of Science Part A* 43: 307–15.
——. 2015. "Hippocratic and Aristophanic Recipes: Same Difference." In *Proceedings of the 13th Hippocratic Colloquium*, edited by L. Dean-Jones. Leiden: Brill.
Van der Veen, M. 2003. "When is Food a Luxury?" *World Archaeology* 34: 405–27.
von Staden, Heinrich. 1989. *Herophilus: The Art of Medicine in Early Alexandria: Edition, Translation and Essa*ys. Cambridge: Cambridge University Press.

——. 1996. “Liminal Perils: Early Roman Receptions of Greek Medicine.” In *Tradition, Transmission, Transformation: Proceedings of Two Conferences on Pre-Modern Science Held at the University of Oklahoma,* edited by F.J. Ragep, S.P. Ragep and S. Livesey, 369–418. Leiden: Brill.

Watson, Gilbert. 1966. *Theriac and Mithridatium: A Study in Therapeutics*. London: Wellcome Historical Medical Library.

Whitke, Edward C. 1965. “Marcus Aurelius and Mandragora.” *Classical Philology* 60: 23–4.

10

VITRUVIUS, LANDSCAPE AND HETEROTOPIAS

How 'otherspaces' enrich Roman identity

Diana Spencer

One of the most fascinating aspects of Vitruvius' work *De architectura* is its blending of real-world sites and topography with a range of ideals and solutions designed to speak to a very specific audience. Writing in what we now term the 'Augustan Principate', Vitruvius was speaking to a readership increasingly equipped with a sensitivity to urban morphology's ideological dimensions, and to a patron (Augustus) with monumental urban redesign in mind.[1] For Rome, the relationship in this era between exurbia and the coherence of space within the city limits was part of a larger debate which sought to understand how and why people and place might resonate productively, and why certain places might prove destined to support greatness. The legendary relationship between Rome as a coalition of people, as a distinctive place, and as architectural form, was especially complex in Vitruvius' era of rapidly increasing immigration and cosmopolitanism, not to mention intensive building and urban redesign.[2]

As Indra McEwen noted in her ground-breaking study of Vitruvius, "the *corpus* of *architectura* was, reciprocally, shaped by the body of empire;"[3] land and people(s) are part of one environmental order. According to McEwen, Vitruvius' work displays an identifiable undercurrent sensible to an ideological dimension embedded in the metaphor of the body politic. This makes Vitruvius' architectural survey an especially interesting text to consider within a volume exploring the relationship between identity and the environment in antiquity. Vitruvius' project was born of an era of relative calm, but with seismic political upheaval still in living memory. His work is not alone in acknowledging the significance of territory when attempting to understand populations, and landmark texts such as Vergil's *Aeneid* and Livy's history of Rome from its foundation make important and comparable interventions.[4] This context adds additional significance to *De architectura*'s systematisation of a necessary compromise between sensibility and knowledge, and its interest in how semiotics enable a bridge between the natural and the constructed.[5] As McEwen eventually puts it: "The cosmic order of *De architectura* is a linguistic order, which is also the order of a man's body or of a temple."[6]

De architectura speaks directly to Vitruvius' dedicatee (Augustus), and modulates its more ostensibly dry representations of architectural theory and practice with a richly acculturated context. Materials, mathematics, and morphology are all present, but contextualised by an understanding of how location and healthfulness intertwine in ways that make substantial differences to the success of individual or community.[7] Vitruvius' ten-book study of architecture

provides a wealth of potential case-studies which speak to this volume's exploration of ancient engagement with the environment. For the purposes of this chapter, my focus is on somatic and technical passages that showcase the text's wider interests: it matters not just how one designs, develops, and decorates spaces and structures, but also how the 'external' origins (the aetiologies) of the systems relate a sense of 'here' (the place where 'we' build and live) to 'there' (the sites from which ancestors, booty, ideas, victories, consumer goods made their way to 'us'). Vitruvius' omnivorous interest in the backstories relating to urban planning, typically stories rooting city in country, or Rome in the Mediterranean, makes his book a study of 'other' places and their role in cultural self-fashioning: a whole array of alt.Romes.

The vision of a land and people sympathetically aligned adds agency to Vitruvius' discourse of environmentalism. Once landscape and natural topography become players in the development of an acculturated community, the ways in which particular sites or qualities are characterised as iconic begin to offer a commentary on what and who the community believes itself to be, and an insight into how that might be scrutinised. Sometimes, as in Livy's famous, impassioned scripting of Camillus' speech denouncing plans to relocate the city after its sack by the Gauls in 387/6 BCE, citizens need to be recalled to a primordial relationship between their political self-fashioning and their environment.[8] The ability of Rome to contain and emblematise all aspects of what different times and various situations need from a cityscape is (famously) evident in Vergil's landmark exposition of a palimpsest cityscape, mapped synchronously for its proto-founder (Aeneas) by the territory's then king (Evander).[9] A similarly nuanced scenography underpins the multi-layered relationship between urban morphology and rustic foundations invoked by other Augustan-era poets such as Propertius and Ovid.[10] Moreover, significant antiquarian scholars, such as Varro, were already making an archaeology of knowledge integral to Rome's development as a site of human habitation.[11]

By the first century BCE, imperial politics, postcolonial unrest, and civil war had made it especially important for Rome to encompass and represent all valued aspects of citizen identity. The legend of Rome's foundation as an instance of controlled diversity, embracing and rewarding different experiences of integration from a range of territories, was emblematic of urgent problems confronting politicians and citizens living through cycles of violence within and outside the city. Rome's constructed, artificial quality marries qualities of *ex nihilo* foundation to various versions of what indigenous ethnoscapes might have existed. Where all civic aetiologies agree is on the intrinsic and powerful generative qualities of its pre-urban and persisting natural topography. These sit at the heart of the literatures of identity beginning to develop rapidly in the first century BCE. That Vitruvius writes from a position of some influence and practical expertise, and addresses the Emperor directly, makes his study of architecture resonate uniquely across genres, from technical and didactic through to historical. His built environment is at once a paradigm for Rome's colonial mandate and a pattern-book for unpacking ideal urban form into its most basic components. Just as scholar, *litterateur*, and politician M. Terentius Varro's Roman archaeology contains the history of city and people, and occasionally enables foundational instances to erupt into everyday life,[12] Vitruvius' study empowers readers to see the environment as a prequel to civilisation and vice versa, and offers genuine technical expertise for practical application.[13]

With this in mind, we can see how technical and antiquarian knowledge of the sort paraded by Varro and Vitruvius might have effects that are alienating (recalling an 'other' world before 'ours' and emphasising forces of environmental and temporal change, some of which humans control but others of which humankind is subject to) as well as empowering. The dialogue between these two results is encapsulated in Michel Foucault's theory of heterotopias, which this chapter takes as an important methodological principle:

> There are also, probably in every culture, in every civilization, real places—places that do exist and that are formed in the very founding of society—which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted. Places of this kind are outside of all places, even though it may be possible to indicate their location in reality. Because these places are absolutely different from all the sites that they reflect and speak about, I shall call them, by way of contrast to utopias, heterotopias.[14]

Foucault talks about heterotopias as sites of absolute difference, but this 'difference' is constituted in the first place by a friction between the complexity of their imaginative reality, and how a community experiences all the other 'real sites' that it inhabits and that heterotopias variously contain. The theatre and the landscape garden are Foucault's illustrative examples. In the second place, these heterotopias manifest and re-present the genesis and subsequent development of a culture and its sites of meaning (this reading emerges from Foucault's location of heterotopia in cemeteries).[15] As with a kaleidoscope, how one shakes up the elements produces something at once strange and familiar. What does this mean for Vitruvius? For a start, it opens up a way of rethinking Vitruvius' part in an ongoing ancient debate with continuing reverberations, viz., how and why geography and climate influence the way humans live (*Arch*. 6 *Praef*. 6.1) and the practice of civilisation (cf., *Arch*. 5.6.9 and 5.9.5). The relationship between climate, topography, and use is never as complete as when presented for didactic purposes, yet although the exemplary site where all the textbook features converge may be elusive, nevertheless without an expectation that it can exist, the lesson is meaningless. A second facet explored in this chapter is the role of the theatre as a place within which key aspects of culture and environment can be experienced and interrogated. This chapter examines Vitruvius' theatre as a structure which represents 'real sites' (in Foucault's terms), and also functions as a crucial 'real site' (with life and death implications) in its own right.

This chapter works through five sections. The first examines site, vision, and experience: starting with global environmental issues and the qualities of the architect (*Arch*. 6.1, 2), moving on to siting a town (*Arch*. 1.4), and the story of (Old) Salpia. The second section examines how theatrical space reflects and speaks about the relationship between community and environment (*Arch*. 5.3, 6), while the third tackles the role of epistemology and expertise in guaranteeing a community's environmental well-being (touching on *Arch*. 1.2, 4–6; 2 *Praef*. 2.1–3). The fourth focuses on one specific case study, hydraulic cement (*pozzolana*), as an example of how technocracy, knowledge, and environmental context can converge to deliver a cultural paradigm (*Arch*. 2.6), while a final section on Vitruvius' book of waters (*Arch.* 8) acts to conclude the chapter.

Siting aright

What makes a specific site *right* for civic foundation (a *locus saluberrimus*)? It is obvious, Vitruvius suggests, that architecture needs to suit the climate it inhabits and the peoples it serves (*Arch*. 6.1.1). This is as much a matter of ethnography as it is of geo-meteorology. Vitruvius' cause-and-effect relationship between human nature and the built environment moves the debate on from 'Herodotean' ethnography by making human intervention in the landscape a manifestation of environmentally alert self-fashioning.[16] This approach draws in particular on the Platonic tradition, in which exceptionality in the environment begins to become significant as a marker for ethnographic difference, but shifts the focus longitudinally

to prioritise Rome.[17] Egypt and Spain, *ipso facto* geographically different to Pontus and Rome, are characterised by different building types to reflect different geographic relations with the sun; characteristics of locale and celestial phenomena together should guide (*dirigo*) construction projects (*Arch*. 6.1.1).

The sun interacts with the human body, readers learn, just as it does with buildings (*Arch*. 6.1.3–10), generating ethnic 'types' in tune with their natural environment. Again, Vitruvius' special insight centres on his insertion of environmental intervention into a reasonably conventional ethno-geographic excursus. In tune with Greek geographic models stretching back at least to Herodotus and the Hippocratic corpus,[18] Vitruvius observes that the characteristics of the inhabitants of different areas suggest that not every zone is equal, and he proceeds to dissect a north–south divide. There is a bright quickness and resourcefulness to southerners which the tactically naïve courage of northerners cannot quite match;[19] in sum, there is only one truly happy site where the engagement of people and place can maintain a perfect balance: Rome's territories, and specifically, Italy, where through architecture, Vitruvius proposes, any environmental givens, injurious in their natural state, can be remedied by skill (*Arch*. 6.1.2):

> And so in Italy the peoples are excellently balanced (*temperatissimae*) in both ways, in proportionality of body and strength of mind when it comes to resolute endurance . . . Thus the divine plan (*diuina mens*) has allocated the city-state of the Roman people (*ciuitatem populi Romani*) to an excellent and temperate (*egregiam temperatamque*) region, so that this civic community may govern (*imperii potiretur*) the whole world (*orbis terrarum*) (*Arch*. 6.1.11).

Unlike the peoples of the reckless north and of the over-intellectual south, hampered by their environments from powering-up their landscapes to the fullest extent, Rome is naturally situated to govern wisely by means of a sympathetic topography. But Vitruvius is keen to underscore the preliminary and contingent quality of this topographic raw material: Greece too, in his scheme, occupies the happy middle (*Arch*. 6.1.6), yet the Greek temperament (lumped in implicitly with all other non-Roman peoples) still lacks an ideal proportionality in its constitution. Thus even the right situation does not guarantee excellence for a community, and this decoupling of the human mind from the native environment marks a significant shift from older models. Informed human input is crucial, but technical skill is not enough when it comes to designing in tune with environmental constraints. Just as with stage design in which the artist uses his skill to make a flat background look three-dimensional, so too the architect must manipulate his location to ensure the proper impact (*Arch.* 6.2.2, 4):

> [regarding the effects of perspective and point of view] Indeed, sight does not seem to yield an accurate account: instead, often the mind is deceived by its conclusions. Thus for example in painted stage sets there appear to be projecting columns, jutting mutules, and figurative statues standing proud, even though the panel is of course perfectly flat . . . Since, therefore, what is real may seem false (*quae sunt uera, falsa uideantur*), and some things are judged by the eyes to be other than what they are (*aliter quam sunt*), I do not think there need be any doubt that to suit the nature or requirements of the site, subtractions or additions ought to be made so that nothing is left wanting from the edifice. This is, however, achieved by shrewdness of judgement (*ingeniorum acuminibus*), not by learned method (*doctrinis*) alone.

The right locale, even developed using textbook methods and by-the-book solutions, is not enough. There needs to be an architect equipped with inborn ingenuity and acumen in order to guarantee a built environment genuinely apt for its users and also suitable to the nature of the site and its wider situation.[20] The Greeks, from the Roman perspective, may simply lack that inborn technical ingenuity. Personal qualities have a determinative force when reconfiguring a landscape because the process has dialogic and thus developmental characteristics: a designed environment's natural features, and their relationship to buildings and infrastructure, also shape human patterns of use and experience of space.[21]

Stepping back from perspective and the architectural schema of well-designed urban form, Vitruvius' first substantive chapter tackles the salubriousness of sites. Whilst the Hippocratic *Airs Waters Places* continues to provide one likely intertext, a more contemporary Roman conversation was clearly in train as intellectuals continued to riff upon what connects a civic community, its environment, its health (in every sense) and its political organisation. Readers approaching Vitruvius on civic foundation might well have been familiar with the environmental shopping list for the ideal country estate, as outlined by Varro (via the character Scrofa), or the environmental aspects underpinning Rome's foundation, as articulated by Cicero's protagonist, Scipio.[22] It is therefore already recognisably Roman to conceive the ideal site as Vitruvius does. Siting a town starts (*Arch.* 1.4.1), he says, with choosing a healthy zone to be walled in: key aspects include elevation and temperate climate (no mists, no biting frosts). Avoid at all costs a marshy vicinity, because the rising mists of dawn will sprinkle the pestilential vapours of marsh animals onto the inhabitants.[23]

A little later, Vitruvius tells a story that draws together some of these issues iconically (*Arch*. 1.4.12):[24]

> Another situated in this kind of location [stagnant and marshy; akin to the Pontine Marshes] was in Apulia, the town of Old Salpia, which Diomedes (or as some have written Elpias of Rhodes) founded (*constituit*) on his way back from Troy.[25] On account of this site, year after year the inhabitants were struggling with illness, until finally they approached M. Hostilius and, publicly petitioning him, gained consent that he would investigate and select a proper site for the relocation of their walls [synecdochically: the town and its people]. Then, immediately and without delay, using the most well-informed judgement (*rationibus doctissime*) he made his investigation and purchased a site near to the sea in a healthy spot (*loco salubri*); from the Senate and People of Rome he requested permission to relocate (*transferre*) the town. He established the town walls (*constituitque moenia*) and divided up the plots and assigned one to each townsman for a sesterce apiece. With this done he opened up the lake into the sea and executed the construction of a harbour from the lake for the municipality. The result is that now the people of Salpia live four miles distant from their former town, in a healthy location (*in salubri loco*).

The identity of the 'M. Hostilius' who solves the citizens' problem and finds them an ideal new civic site is uncertain. Cicero (*De lege agraria*) refers to *Salapinorum pestilentia*, a place proverbially dank, suggesting to many (unnecessarily) that in 63 BCE the relocation had not yet taken place.[26] The town seems for the most part to have been of little interest to Rome until it became a stronghold for Hannibal right after Cannae, providing winter quarters in 214 BCE (and for Pliny, a story of Hannibal's crush on a prostitute); it only fell (by treachery) to Rome in 210 BCE.[27] From then until the Social War, it appears to have prospered, making eccentric both Cicero's characterisation and Vitruvius' identification of the town as iconic for insalubrity.

The question is whether Cicero's remark is highlighting how politics reverberates into environmental topography: the town and its territory become toxic both as a result of their stand against Rome and also the town's subsequent destruction by C. Cosconius in 89 BCE.[28] The town characterised as so insalubrious by Vitruvius is clearly signposted as the original foundation (*uetus*). The text would seem to imply an unbroken timeline from inauspicious (and variously Hellenic) foundation site to the town's Roman rescue, relocation, and reinvention by 'Hostilius'. But where does 'Hostilius' fit in: pre- or post-Cosconius' devastating visit? The handy excision of Salpia's compromised historical relationship with Rome and Rome's somewhat recent destruction of 'old' Salpia emphasises the friction between the story as told and the recorded history that Vitruvius' audience might be aware of. There is either unfortunate Salpia, poorly situated by its Greek founder, receiving Rome's aid and thus renewed, or prosperous and confident Salpia, repeatedly attempting to escape Rome's influence and eventually turned into a pestilential wasteland to teach its people a lesson. Only once Salpia had recognised that Rome's beneficence was necessary and acknowledged Rome's territorial authority could a truly healthful town be refounded.

The role of the theatre

Old Salpia's fate is interesting in the context of Rome's situation, founded legendarily next to a swamp (the Palus Caprae), on a flood plain, and with marshy echoes persisting in the marbled monuments of the Forum (for instance, the Lacus Curtius).[29] Compare Vitruvius' comments on the insalubrious quality of the exhalations threatening the health of happy theatrical audiences, and one starts to see how urban morphology indicating civic prosperity (prosperity such as that which attracted Hannibal to Salpia), insufficiently planned, can be lethal (*Arch.* 5.3.1):

> Once the forum has been set out (*constitutum*), a site of great healthfulness (*locus saluberrimus*) should be chosen for the theatre, for the spectacle of the games (*ludorum*) on the feast days of the immortal gods. This should be in accordance with what was written in the first book about healthfulness in the placement of [city] walls. For at the games, sitting for long periods with their wives and children, all are kept in place by the delights; their bodies, motionless with pleasure (*uoluptatem inmota*), have their pores (*uenas*) open. Into these, breaths of wind find their way (*insiduntur*); if they come from marshy regions or from other unwholesome districts they will flood noxious exhalations into the system. Thus, if particular care is taken in selecting the site for the theatre these ills will be avoided.

This passage is significant for its intratextual emphasis (Vitruvius exhorts readers to recall what he said back at the beginning, *Arch*. 1.4.1, which segued into the story of Old Salpia) and its conjunction of public, communal, propitiatory entertainment with the threat of environmental disaster. The civic act of spectating in celebration of some god can, in a poorly conceived urban scheme, kill the citizen it sets out to protect, and leisurely sitting is exactly what one does not do in the Forum or other kinds of public space.[30] Here in book 5, Vitruvius directly links a community's key commercial and ontological sites ('forum' signals business, commerce, law; it typically involves collocation with religious cult sites and in early polities, a place of entertainment)[31] with the threatening prospect of a porous corporate body, one open to insidious attack even when in the community's most acculturated space. In visualising the self as incorporated and systematised (by way of participation in the theatrical audience), Vitruvius is in tune with an Asklepiadic reading of the body, one supported by Antonius

Musa, another of Augustus' technical advisers, and thus part of a broadly politicised intellectual drift in Augustan Rome.[32] If this vulnerability can befall even a well-situated and thriving town, how much more damaging for the insecurely founded and politically vacillating inhabitants of Old Salpia.

Salpia's story contextualises Vitruvius' turn to the architectural forms and appurtenances of the theatre to enrich an environmental point. A little later, the theatre's imaginary worlds offer a Wayback Machine,[33] curating emblematic architectural forms and topographic frames of reference and displaying crucial motifs and ideations at the heart of citizen self-fashioning:

> The scenery itself has its own organisation, arranged as follows (*rationes explicitas ita*): in the middle, folding doors should have decoration appropriate to a royal palace (*aulae regiae*), to the right and left are the 'guest rooms' (*hospitalia*) [guests: strangers whom one welcomes]. Beyond are the spaces provided for the set (*ad ornatus*); these places are called *periacti* in Greek because there are in these places revolving three-sided machines (*machinae sunt in his locis uersatiles trigonos*) decorated with three different scenes. When there are to be changes in the plot [or 'play' (*fabularum*)] or the appearance of gods, with sudden thunderclaps, they are turned and change the appearance of the scenic ornament on their fronts. Next to these at angles jutting out are the spaces giving entrance to the stage, one from the Forum, the other from 'away' (*una a foro, altera a peregre*). There are three types of scenery: one which is called tragic; another, comic; the third, satyric. The decorative scheme for each is different and unalike. Tragic scenery is designed with columns, pediments, statues, and other trappings of royalty; comic scenery exhibits private buildings and balconies, and views from windows arranged to imitate the layout of ordinary buildings (*prospectusque*[34] *fenestris dispositos imitatione communium aedificiorum rationibus*). Satyric scenery is decorated with trees, caverns, mountains, and other such rustic subjects designed to resemble landscape (*arboribus, speluncis, montibus reliquisque agrestibus rebus in topeodi speciem deformati*). (*Arch*. 5.6.8–9)

How to interpret Vitruvius' *periacti* and their relationship to the two side exits continues to intrigue scholars of ancient drama, but pinning down the technical detail is not important in this context.[35] Instead, and crucially, we see that there is a distinctly Greek and historically accented tinge to the theatre's mediation of Roman performance. Monarchy is intrinsic to this scenography, as it was for Rome's foundation. Rome's legendary foundation was not just part of a monarchical story, it also made topography and environment central to the formation of the new community and to the redefinition of its first citizens as Roman. As the story went, Rome's founding fathers were the blow-ins and rag-tag from neighbouring territories, invited by the first king, Romulus, to make up the citizen rolls by joining him at the Asylum (the saddle between the once wooded Arx and Capitoline peaks).[36] The stage set in this way evokes and contains emblematic elements of citizen identity: it recalls the role of autocracy in Rome's past and it directly connects that governmental model (the central door) to the territorial heterogeneity of the first Romans (one entrance from the Forum, one from 'everywhere outside'). It encourages Roman audiences to consider the significance of welcoming outsiders onto a stage that draws on Greek models and cultural frames of reference, and it collocates Forum, countryside, and foreign parts as interconnected aspects in a collective worldview.

To sum up: Vitruvius' description of the theatre produces a species of heterotopia, or new Asylum, reconvening citizens to explore other versions and archetypes of what life might offer. It contains Rome's Hellenic and Italic roots and monarchical backstory, and it

manifests the dramatic city as a laboratory space for exploring how peoples interact within defined topographies and against changing landscape modes. This scenography kept a fantastic variety of locational combinations in play, one that allowed characters to act and interact in conjunction with landscapes ideally suited to interrogating questions of environmental determinism. Twin revolving sets, as Vitruvius describes them, enable the production of subtle and complex scenographic texture in which temporality, cosmogony, and locale can be formulated and reconfigured, while the physical structure of the set draws in and expels the Forum (the urban heart) and the exurbs. In addition, the kinds of modulation of landscape available to scenographers evoked different modes of topographic empathy. Two were humanocentric. The architecture of grand public buildings and regal semiotics signalled 'tragedy'; domestic architecture, full of *trompe l'oeil* balconies and reality-effect glimpses through windows, suited 'comic' drama.[37] The third, the world of satyrs, depicted a species of natural landscape in which the typical signs of 'countryside' combine to produce a world outside the normal confines of public and domestic politics (typically imagined within an urban frame), and populated by pre- or para-human figures.

The sympathetic potential of nature's scenography is complicated on stage by the lurking presence of the 'satyric' environment (when the *periacti* swing round, changing the set), ever-present structurally even when off-stage. By containing "everything" (in emblematic form), theatres are inevitably "absolutely different" in Foucault's terms from "the sites that they reflect and speak about," exactly because they deliver a totalising sense of, and access to, all aspects of communal identity, memory, and relationship with territory, a fiction that cannot be matched in the real landscape.[38]

Vitruvius offers a different take on how humankind relates to the environment when he returns to the salutary relationship between citizens and the natural world just outside the theatre building, further blending Greek and Roman experience of architecture as a point of interface with nature. After a description of the colonnades that should accompany theatres (*Arch*. 5.9.1), with examples drawn from Rome and Athens, he turns to the open, green spaces these colonnades ought to give way onto (*Arch.* 5.9.5–6):

> The central courts, open to the sky, which are bounded by porticoes, should be visibly embellished with greenery (*adornanda uiridibus uidentur*). Walking *en plein air* (*hypaethroe*) is very healthy (*habent magnam salubritatem*), especially for the eyes, because from the greeneries a fresh and rarefied air (*subtilis et extenuatus aer*), flowing into the body on account of its motion, sharpens the vision (*perlimat speciem*), and thus in clearing away from the eyes the thick humour, it leaves the gaze exact and the image acute (*aciem tenuem et acutam speciem relinquit*). Moreover, since the body, by motion, in walking heats up, the air draws the humours from the limbs and diminishes their repletion, dissipating the excess beyond what the body can bear. It is possible to see this in action by noting how when springs of water are covered, or a marshy swell is underground, misty humours arise from neither; yet at open, *plein air* sites (*apertis hypaethrisque locis*), when the rising sun touches the world with its warmth, it draws the humours from damp and watery sites and rolls them in masses high into the sky. Therefore if it seems thus, that in *plein air* places these more troublesome humours (*molestiores*) are drawn out by the air from the body, just as may be seen in the case of the earth in the form of clouds, I do not think it is in doubt that in cities the most spacious and ornamented promenades ought to be laid out, open to the sky and *en plein air* (*amplissimas et ornatissimas subdiu hypaethrisque conlocari oporteat in ciuitatibus ambulationes*).

This passage sets up a number of key considerations. First, it emphasises the dialogic quality of ideally humane space. Here we see how interstitial plots bring green nature into direct contact with the built environment and human users. The healthful and beneficial properties (*salubritas*) of these spaces are directly relevant for core citizen self-fashioning. They facilitate open-air perambulation and a balancing of humours that leave strollers in possession of a clarity of vision, efficiency, and purpose, echoed in the dry and well-defined quality of the walkways themselves, and relating the human condition directly to environmental reality.[39] Water, we can see, is something at once vital to life and in need of proper management (a distinctively Roman touch), and this is as true for the balanced system exemplified in Italy's natural environment as it is for the built environment that should seek to learn from it.

Of particular significance for this chapter is that the construction of stone theatres at Rome was still a novelty when Vitruvius writes. Augustus made the restoration of Pompey's theatre (Rome's first permanent theatrical structure—and leisure complex, complete with extensive portico garden) an early priority;[40] and the life and early death of his first-choice heir was commemorated by another theatre, dedicated in 13 BCE, completing another unfulfilled legacy of Caesar's urban programme.[41] Taken together with the Theatre of L. Cornelius Balbus (also dedicated in 13 BCE; a monumental nod to the spoils of Balbus' triumph of 19 BCE over the Garamantes, the last triumph accorded to a private individual at Rome) and the Amphitheatre of Statilius Taurus (dedicated 30 BCE), Vitruvius' homing in on theatres shows an alertness to a politically lively architectural zeitgeist. The provision of open space in which it was not just safe and pleasant to congregate, but positively life-enhancing, was further politicised as the imperial tradition of forum construction developed in the first century CE.[42]

Boundaries and the manifestation of knowledge

Vitruvius' ideal architect needs to be in command of all requisite technical and scientific skills and to be endowed with artistic inspiration, but he also requires knowledge of history.[43] As the author puts it, ornament and embellishment typically come with backstories (*Arch.* 1.1.5). Readers see the role of history vividly in the story of Salpia, and Vitruvius has already emphasised the relationship between tradition, history, and knowledge in his advocacy of the old-school method (*ueterem rationem*) when testing the water and pasture at potential sites for new foundations.[44] The culmination of this characterisation of the architect as polymath is when his expertise is described as the *templum* occupying the acme of a progressive education.[45] *Templum* is a significant Foulcauldian heterotopia because it is not just a structure erected for religious worship but also a point of celestial interface for humans and humane landscapes. The *templum* denotes a defined patch of sky within which auguries take place and prognostications are made. For Rome's site this is especially significant, since the late Republic saw increasing interest in legends of the city's competitive foundational augury. Stories had it that within augural *templa* sighted from Rome's Aventine twin peaks (or from Aventine and Palatine, depending on the storyteller), the flights of birds observed in ritual fashion determined that Romulus, not his twin brother Remus, would found the new city, and would do so on the Palatine hill.[46]

The cosmic and constructed qualities of *templum* neatly encapsulate the intricate relationship between nature, politics, and town planning that underpins urban foundations. The characteristic feature of a civic community is an urban centre, defined against and separated from its hinterland and the wider world by fixed and only semi-permeable boundaries: city walls. City walls define the community and organise its relationship with hinterland and wider territory. They thus have a part to play in guaranteeing salubriousness (*Arch*. 1.5.1),

part of which is to systematise the community within a defined environmental context. They need to signal the relationship between the citizen body and the farmland that feeds them, but they must also enable a transport network (land or water) connecting the protected community to the wider world. Walls protect citizens from attack (*Arch*. 1.5.2–7) and are therefore in part outward-facing, but within their embrace town planning from boulevard to backstreet is needed in order to ensure that inclement wind-tunnels and consequent disease are avoided.[47] The kind of ideally healthful symbiosis between environment and urban form that Vitruvius has been at pains to sketch should result in superbly fit inhabitants, especially if the town is designed holistically. This model does, of course, depend on a truly adept architect.

The Preface to book 2 exemplifies what might have happened had one visionary town-planner been allowed to pursue a project where site, plans, and end-users were out of sync. Vitruvius characterises 'Dinocrates', an architect in search of a powerful patron (Alexander the Great), as tall in stature, handsome in countenance, and exceptional in respect to shape and dignity.[48] Dinocrates' alter ego, when he dresses up to catch the king's eye, is Hercules, and Dinocrates approaches the king (who was himself rather fond of Herculean comparisons) in this guise.[49] This perfect specimen of The Architect claims to offer antiquity's archetypal imperialist a piece of terraforming designed to showcase how landscape and humanity can merge on a grand scale (*Arch*. 2 *Preaf*. 2):[50]

> [Dinocrates speaking] 'Indeed, I have designed (*formaui*) Mount Athos into the shape of a male statue, in whose left hand I have marked out (*designaui*) the walls of a very spacious city (*ciuitatis amplissimae*), and in his right a bowl to catch the water of all the rivers which are on the mountain, whence they shall be poured into the sea.'

McEwen's analysis of this passage challenges readers to see Vitruvius' Dinocrates less as an identifiable historical individual and more as an embodiment of the creative force of nature, which in conjunction with Hercules' civilising persona can be repurposed (by way of education and practical experience) to serve humanity in the figure of the ideal architect.[51] Where Dinocrates fails, in this telling, is in his inability to think beyond the grandeur of the vision as it reflects on himself and delivers his personal goal (Alexander's patronage).[52] Hence he forgets that water alone, even when controlled by grand hydraulics, will not sustain the city; it also needs a fertile and connected territory.[53] What he cares about is the bold visual and ideological statement of the man-mountain supported city, serving his ambitious professional self-fashioning. He fails accurately to assess the too-dramatic contrast between the city's magnificent location and the pragmatics of what a community needs. By contrast, Vitruvius' ideal architect's combination of practical know-how and intellectual equipage can exemplify a distinctively Roman environmental technocracy, possible precisely because Romans are already in possession of advantages characteristic to the distinctive landscape that they have developed, and developed their identity within.

Of course, Dinocrates' scheme is magnificent in its design (*forma*), and the afterlife of the dramatic terraforming it proposes continued to reverberate.[54] Vitruvius is careful to emphasise, however, that it is poor in its likelihood of successful implementation (2 *Praef*. 3). Dinocrates' over-reliance on theory and quest for personal glory is contrasted with Alexander's pragmatic foresight (a city, like a child, needs nutrition to grow and flourish, 2 *Praef*. 3); this in turn allows Dinocrates eventually to reach his full potential (the careful planning of Alexandria), and highlights the contrastingly solid foundations of Vitruvius' own starting proposition, whereby the

architect can avoid hare-brained juvenilia if he can depend on his panoply of knowledge and his ability to express this expertise via a compelling authorial persona.[55] He also, of course, needs the right patron whose real-world experience of civic power can appropriately complement and underpin the adept architect's visionary schemes. Although Alexander the Great was not to develop into a significant comparator for Augustus, this anecdote produces a version of enlightened rule that sits comfortably with aspects of the developing Principate.[56]

In Dinocrates' project for Alexander at Mount Athos, heterotopia too is impossible because this town is founded without collective context; for its imagined citizens (10,000, in Plutarch's version), this model community fails to deliver a legendary or topographic rationale for its site, or any humane value save the spectacle of its existence. There is no 'there' there, no 'otherspace' rooted in a shared and memory-laden act of foundation, nothing beyond a solipsistic ambition to create a symbiosis between humans and landscape so complete that the two are no longer visually distinct. Without a cluster of overlapping shared rationales for why 'us' and why 'here', what Edward Soja has termed 'real-and-imagined' space cannot come into being, and the productive potential of Foucault's heterotopia to represent, contest, and invert has nothing from which to develop.[57]

History, in Vitruvius' book, primes the architect to understand the development of civilisation and technical advances over time. It also produces a narrative of the relationship between humanity and the environment. It is to the development of this story that Vitruvius turns next (*Arch*. 2.1, 2–3):

> People, in the old way, were born like wild beasts in the forests, caverns, and woods (*ut ferae in siluis et speluncis et nemoribus*), and filling themselves with field forage (*ciboque agresti uescendo*), thus they passed their lives. Meanwhile it happened at a particular spot that a thick grove of trees, by storms and gales repeatedly tossed, from the friction between their branches sparked a fire. Terrified [in their ignorance] by the blaze raging, those who were in the vicinity of the spot fled. [None the less, recognizing the benefits of fire, they soon learned to master it and communities began to develop] . . . and many people came together to associate in one place, uniquely rewarded by nature with the ability to walk erect rather than head-down, and so to gaze meaningfully upon the magnificence of the world and the stars (*mundique et astrorum magnificentiam aspicerent*), and also in their ease in manipulating whatever object they wished with their hands and jointed fingers. Some then began in this community to construct shelters with leaves, others to tunnel into hills; some, imitating the nests of swallows in their structures, deployed mud and twigs. Then observing the shelters of others and adding new elements to their thinking, day by day they constructed better kinds of houses. Since men were imitative and instructable by nature (*imitabili docilique natura*), daily they displayed to all their various achievements in building; thus while glorying in their inventions (*inuentionibus gloriantes*), and exercising their talents in their rivalries (*exercentes ingenia certationibus*) every day, they became more accomplished in their judgement. And so at first with upright forked supports, interspersed twigs, and mud, they wove their walls. Others constructed walls by drying moistened clods, joining them with timber, and to escape the rain and heat they covered them with reeds and foliage. After that, when these roofs could not withstand the winter season's rains, making ridges with clay covering the slopes, they drew off the rainwater.[58]

The account of humankind's first moves towards harnessing nature and developing a civilisation in tune with the environment is strikingly Lucretian, and Lucretius' epicureanism,

with its doctrine of atomic formation at the heart of cosmic development, sits comfortably with Vitruvius' location of natural philosophy, history, and technical skills in the person of the architect.[59] This is a story of civilisation fashioned by iterative architectural practice and powered by leaps of imagination. The first eco-huts of Vitruvius' prehistoric community are not far removed from animals' lairs and depend on ready-made supplies rather than refined or pre-processed materials. The term for these huts is *casa* (*Arch*. 2.1.2). By continuing to increase their ambition and skill, in tune with natural providence, humans began to build not just 'huts' (*casa*-style) but solidly founded houses (the resonant term *domus*) with brick or stone walls and roofs fashioned from wood and tiles.[60] They achieved this by observing that raw materials for building abounded in nature, and carefully managed, they could contribute to a life of the utmost in refinement and civilisation (*Arch*. 2.1.7). By developing from 'hut' to 'house', they made their shelters into 'homes' and enabled a settled, familial way of life (*mos maiorum*) in which knowledge, values, and memories might be created and transmitted.

Within the technical terminology bringing solidity to these delightful and civilised edifices, Vitruvius' readers might well recall that Rome still boasted a *casa*, and Vitruvius brings this persistence directly into the frame when he goes on to observe (*Arch.* 2.1.5) that primitive building types along these lines persist in all sorts of places (his first examples are Massilia and Athens). At Rome, Vitruvius notes, this type of thatched hut is exemplified in the Capitoline *casa Romuli* (*Arch.* 2.1.5). Along with the straw-roofed shrines on the Arx, the author comments, it reminds readers of (*commonefacio*) and instantiates (*significo*) an ancient way of life (*mos*). This editorial gloss gives the Capitoline an 'otherspace' quality: it is a place where citadel, sacred space, and mementoes of primitive Rome's foundation coalesce. This telling also elides the alternative and perhaps stronger claims of the Palatine to house the founder's humble shack.[61] Readers might suspect that by mentioning only the Capitoline site for Romulus' thatched hut, Vitruvius implicitly allows Augustus' famously simple Palatine townhouse to maintain its humblebrag iconicity.[62]

A namecheck for the Capitoline *casa Romuli* has another interesting effect: it keeps the connotative qualities of the term *casa* clearly separate from the everyday and familiar domesticity of an urban morphology of homes, apartment buildings, businesses, shops, and taverns. This is important because it situates Rome's *casa* as a teaching tool available to skilled educators and practitioners, and underscores the need for architects to be able to read through the highly refined materials and elegant appurtenances of civilisation to the naturally harmonious and supportive bond linking humankind and the environment; a bond that continues to underpin the increasingly marbled imperial capital. In this scheme, Augustus' urban vision (rebuild and renovate) becomes the latest phase in an evolutionary process rooted in natural forms, a productive harmony between humans and the natural environment.[63]

Case-study: cementing a miracle?

> '*Est etiam genus pulueris, quod efficit naturaliter res admirandas*' ('There is also a kind of powder which naturally produces marvellous results.') (*Arch*. 2.6.1)

Augustus famously made a career keynote of the excavation of marble (from Rome's environs and much farther afield) and its repurposing in the cause of Rome's architectural glory.[64] In book 2, Vitruvius turns to the qualities, selection, and processing of the technical materials with which the architect works. Bricks, sand, and lime are his first points of focus, but then he tackles hydraulic cement (a characteristically Baian or Vesuvian "powder," he calls it), a natural product that gave Roman concrete construction its most dramatic successes. This is

the technology that not only reinforces standard building types, but also produces a kind of miracle: "when piers are built into the sea, they harden under water" (*Arch*. 2.6.1).

The development of a technology to support underwater construction was not always happily glossed. Famous critics of this kind of transgression of the natural order include Vitruvius' (probably) younger contemporary, the Latin poet Horace. Horace articulates a wide-ranging cultural concern regarding the new scale of elite and typically 'private' building programmes.[65] Horace's verse shows at least an awareness of the environmental challenges faced by coastal waters and ecosystems under pressure from extensive use of this kind of technology, and Varro (whom we know Vitruvius found persuasive) in his work on the countryside uses the excessively luxurious country estate as a trope for exploring what the right relationship between mankind and the natural environment ought to be.[66]

The fiery subterranean *terroir* of the Bay of Naples produces a super-desiccated material, *tofus* (tufa). Vitruvius explains it thus: if tufa is mixed with other substances similarly formed through violent fiery activity, then the intensity of their lack of moisture causes them rapidly to suck up water and through this moisture, to cohere into something too solid for waves or additional water to dissolve.[67] Vitruvius' characterisation of the key ingredient, the special powder, as native to Baiae and the Vesuvian territories (*Nascitur in regionibus Baianis . . .*, *Arch.* 2.6.1) is significant. In the late first century BCE, Baiae was a byword for luxurious lifestyles, a holiday town where wealthy Romans could shed their virtuous civic selves and indulge in a lifestyle out of kilter with Roman civic mores.[68] By contrast, Vitruvius' Baiae and Vesuvian Riviera produce the raw material which makes Rome's most characteristic massive infrastructural and terraforming projects possible: aqueducts and concrete vaults. It is to be sure a complex environment, with underground heat still violent enough to power the sweating-rooms (*Laconica*) in bath-houses, even if dramatic Vesuvian eruptions were ancient history at the time (*Arch.* 2.6.2). Many locales, as Vitruvius acknowledges, might appear to have the right conditions to produce the crucial ingredient, but he goes on to explain that intense subterranean heat is insufficient alone to create the right conditions for the formation of this marvellous substance. Only at sites where fire has breached the division between underworld and ground level can this powder be found, and the evidence of this can be checked against ancient records (*Arch.* 2.6.3). Vitruvius twice links the verb *memoro* (to record, recall, tell) with the idea of antiquity (*antiquitus*, then *antiquus*—old-time, ancient, former) to mark up the role of the expert researcher in identifying and capitalising upon the natural transformation of these key sites from fiery wasteland to civilised territory (*Arch.* 2.6.2, 3). With this knowledge in hand, it becomes possible to recognise where the marvellous powder can be sourced.

Vitruvius' telling emphasises how specific to a few sites is the coalition of particular *terroirs* and creative, historic breaches in the earth's crust allowing the elemental fires to pour out. Not all environments are as accommodating of ambitious human creativity.[69] Not all environments are equal, and this applies as much to the outputs of the mostly unseen subterranean fires as it does to above-ground territory. Some fiery underworlds just do not deliver on *pozzolana*, venting only heat and steam, and not every environment that looks and feels the same, is the same. "The nature of things" (*natura rerum*) is not to suit the pleasure (*uoluntas*) of mankind but to follow its own pattern of disparities (*Arch*. 2.6.5); as part of nature's pattern, communities are also disparately grouped elements in, rather than extraneous users of, the system.

Storied waters

The astonishing range of properties which water can display, making it akin to the human body in its variety of constituent elements, is at the heart of Vitruvius' parallelism between

humans and the environment; it is also in tune with Roman intellectual interest in interrogating forces of heterogeneity and change within the body politic.[70] From Strabo's Augustan-era *Geography* (5.3.8) through to Pliny the Elder, in the mid-first century CE (*HN* 36.123) and on to Frontinus (writing in the late first century CE, *Aqueducts* 87, 88), Rome's mastery of water is a core identity feature. In the late Republic, the prehistoric site of future-Rome was typically imagined as a marshy environment, punctuated by hills and pools. The Greek historian and rhetorician Dionysius of Halicarnassus spent significant time in Rome after Augustus' authority had been consolidated, and, like Strabo, picked up on the persistent link between a watery landscape and the triggers which brought about Rome's legendary foundation.[71] Luminaries of an earlier generation—Cicero, who showcases the archaic qualities of bubbling water characterising the site from the beginning, and Varro—had already made water a historical protagonist in the development of the contemporary cityscape.[72] Rather later, Frontinus (*Aqueducts* 4) emphasises how Rome moved from dependence on the Tiber and on still famous and healthful native springs, to the kinds of hydro-engineering that delivered water to order via aqueducts (beginning with the Claudia in 312 BCE). It is in this context significant, given Vitruvius' decision to address Augustus, that the Princeps' management of water would feature in his record of his achievements (*MonAnc* 20).[73]

Vitruvius eventually devotes a whole book to detailing how to find water, the qualities proper to its various sources (*quasque habeat in locorum proprietatibus uirtutes*), how to manage its courses, and how to test it (8 *Praef.* 4). McEwen is especially clear on what makes water per se a challenge to Roman autarky: 'You cannot chisel IMP. CAESAR onto water.'[74] Yet as Vitruvius and others show, the physical constraints imposed on water continue to display Rome as a worthy adversary. Yes, the Tiber continued to flood, yet drainage works and the hilly topography made the urban centre habitable even if sites in the wider territory such as the Pontine marshes (looking south-east along the coast) famously resisted hydraulic solutions (as Vitruvius' comments acknowledge).[75]

This book of waters (*Arch.* 8) is too wide-ranging for substantial analysis in the present chapter, but I will trace the discussion in brief. Early in the book (*Arch*. 8.2.6), Vitruvius makes a statement of environmental epistemology which suggests that understanding the movement of waters on a grand scale, and being able to visualise or describe their geographic disposition, is how humankind can witness and see a meaningful demonstration of natural forces. Warm winds, heated, blow from the south and gather moisture that they release the further north they travel (*Arch*. 8.2.5). The proof is attested by the tendency of major rivers to flow from north to south, which painted world maps and written geographies illuminate (*Arch.* 8.2.6, 8). Rivers are not the only source of interest; naturally occurring hot springs can be so delightful in flavour, Vitruvius suggests, as to outshine not only Rome's famous spring of the Camenae (on the Caelian hill), legendary home to Rome's Muses, but also the Aqua Marcia (paid for from the spoils of Roman imperialism, namely the destruction of Corinth and the defeat of Carthage in 146 BCE),[76] that would be restored by M. Agrippa and Augustus himself.

Water can be curative for ills, it adds character and distinction to the kinds of wine each *terroir* produces, and in conjunction with the position of each landscape relative to the sun, it produces unique conjunctions of plant and animal life.[77] Water can also cause direct harm. Vitruvius catalogues a whole array of variously injurious waters for bathing, cultivating, and drinking purposes (*Arch.* 8.3.15–23), and offers a short section (*Arch.* 8.4) on how to quality-test newly discovered sources (his first suggestion is to examine the locals for signs of infirmity). The possibility that water can be over-engineered into harmfulness is the conclusion of his section on aqueducts (*Arch*. 8.6.10–11), and is where this chapter

also concludes: water from earthenware pipes (*tubuli*) is healthier (*salubrior*) than water carried by lead pipes (*fistulae*). In articulating this contrast, Vitruvius is in line with the position taken by Varro (*Rust*. 1.8.4), and which would be picked up by Columella (*Rust*. 1.4. 10–1.5.1).[78] Lead, a natural material, harms humans when it contaminates key corporeal and environmental elements—air (in manufactories where it is worked) and water (where it is in direct contact with pipes). The message here is pragmatic, but Vitruvius' moralising final point makes it clear that lead's toxic quality is not the only factor to be counted in (*Arch.* 8.6.11): 'Everyday life shows that there is a better flavour from earthenware pipes because everyone, even when their tables are set with silver vessels, still uses terracotta in order to maintain the purity of the flavour (*saporis integritatem*).' Terracotta tableware ensures that every meal returns diners to the primitive harmony between environment and human progress, a relationship signified by the role of water, earth, and fire in sustaining civilisation.[79]

Water, whether moisture, marsh, spring, or sea, has been crucial to this chapter's reading of Vitruvius. Commencing book 7, Vitruvius creates a striking metaphor in which water becomes a way of conceptualising and interacting with the archaeological storehouse of knowledge. Past generations of scholars, Vitruvius observes, have furnished a wealth of resources akin to an ever-flowing spring (*fons*) from which subsequent scholars can draw water (*aqua*).[80] It is this watery outpouring of resource which makes possible the new principles of architecture (*institutiones*) that he proposes.

Water, in its omnipresence and especially in its ability to reflect zoological, territorial, historical, and epistemological approaches to existence and progress, is the ultimate manifestation of the Foucauldian 'otherspace' with which I commenced. This chapter has tracked the genealogical underpinnings of Vitruvius' brand of textuality. Vitruvian professional know-how is transmitted within cultures and communities in distinctive ways and in line with environmentally determined contexts; it has a presentist focus, assuming an inherent "nature of things" despite its emphasis on the importance of learning from history. In this respect, its practice-based and situational interest in the environment might seem more in line with Michel de Certeau's rethinking of Foucault; in particular, de Certeau's prioritisation of the everyday acts of individual creativity that incrementally shift patterns of use.[81] Instead, I return to Foucault's comment that 'there are also, probably in every culture, in every civilisation, real places—places that do exist and that are formed in the very founding of society.'[82] Vitruvius constitutes a disciplinary identity for architecture (his work is packed full of instances of places that really do exist) by connecting it directly to a historically attuned environmentalism (to identify and understand how and why some of these are especially telling sites requires a knowledge of history and an awareness of how environmental and biological forces entwine). In creating a 'body' of architecture, he is in tune with scientific thinking on geography, but he is also echoing a cultural context whereby the determinative role of the individual is novel and politically complex (Rome's turn to autocracy, and Augustus' brand of power). As he concludes: "this body [of work] has in ten volumes unfolded every architectural limb."[83, 84]

Notes

1 On Vitruvius and his world, see, e.g. Gros 1997, Romano 2010, Wallace-Hadrill 2008, 144–210.
2 Marble quarries at Luna came on-stream in the late first century BCE (see Strabo 5.2.5); DeLaine (1995, 2000) surveys the kinds of supply-chain and commercial activities underpinning the role of a glittering new raw material in Augustus' famous reported claim to have enmarbled Rome (Suet. *Augustus* 28).
3 McEwen 2003, 301.

4 E.g. Vergil, *Aeneid* 1.278–82, *Georgics* 1.1–42 (see Hardie 1986: 199); Livy 1.4–8; Ovid 15.736, 830–31 (see Barchiesi 2001: 74). Scholarly context is provided by, e.g. Varro, *Rust*. 1.3–7.
5 McEwen 2003, 71–2.
6 McEwen 2003, 73.
7 On the geographic shifts taking place, see Clarke 2000.
8 Debate continues as to the exact sequence of events around the fourth-century BCE Gallic sack of Rome. Cornell 1995: 309–26 teases out the competing narratives. In effect, Livy's Camillus speaks eloquently and passionately against the idea that Rome is the sum of its people (Livy 5.51–4). See also Plutarch, *Camillus* 22–32.
9 Vergil, *Aeneid* 8.337–65; see Spencer 2010, 49–55.
10 E.g. Propertius 4.1; Ovid, *Fasti* 1.197–208, 3.71–2.
11 See Spencer (forthcoming) on Varro's 'tours' of Rome (Spencer 2015 explores the second of these tours, Ling. 5.143, 145–68), and, e.g. Wallace-Hadrill 2008: 145–6, 150–51. New ways of recasting the design and monumental programmes of the first century BCE continue to be informed by deeper understanding of the geoarchaeology of Rome and its impact on raw materials in use; see, e.g. Jackson and Marra 2006.
12 Famously, Cicero comments that Varro's *Antiquitates* helped to lead home a people who, although in their own city, were 'still wandering and straying as if strangers', 'so that we were at last able to recognize who and where we were' (*Acad*. 1.9).
13 E.g. Andrea Palladio, in his preface to his work *I quattro libri dell'architettura* (1570), characterised his endeavour as a project of recuperation of ancient architectural practice as witnessed in Vitruvius. Compare Henry Aldrich's early eighteenth-century *Elementa architecturae civilis ad Vitruvii veterumque disciplinam, et recentiorum praesertim a Palladii exempla probatiora concinnata* (Aldrich 1789). More generally, Boucher 2000.
14 Foucault 1986, 24 (the material had its genesis in a 1967 lecture).
15 Foucault 1986: 'the cemetery is indeed a highly heterotopic place since, for the individual, the cemetery begins with this strange heterochrony, the loss of life, and with this quasi-eternity in which her permanent lot is dissolution and disappearance.'
16 Romm 2010, 219–20 articulates the backstory of a hot/cold ethnographic model, and also (2010, 221–3) unpacks the implications of the anonymous late fifth-century BCE treatise *Airs Waters Places*, which emphasises a political driver for character-formation, acting alongside climate. Thomas 2000, 102–34 makes a subtle case for Herodotus' sensibility of a discursive or contestable space within the process of ethnicity-formation, which could encompass a polar understanding of climate and its relationship to ethnicity (*physis*), and also a concept of norms and values with culture-shaping force (*nomos*). Talbert 2010, 252–3 briefly emphasises Roman ability to reconfigure the landscape as central to their worldview.
17 E.g. Plato, *Timaeus* 24c–d, *Laws* 747d–e, where environment contributes directly to excellence within a specific political community. This is part of a tradition that recurs in the approach developed for Italy at the end of Strabo 6; see Nicolet 1991, 57–84. The idea that distinctive environments with exceptional qualities determine but also respond to characteristic ethnographic qualities, including technocratic ability, is at the heart of late Republican ethnohistory. Compare Varro (e.g. *Rust.* 2 *Praef*. 1–2), who also tackles the ethics and implications of profit-focused environmental interventions (e.g. *Rust.* 1.4.2). Varro's animal metaphors in *Rust.* (discussed by Kronenberg 2009: 112–28) show how the right environment, appropriately cultivated, promotes excellence. Ergin 2008 usefully catalogues ancient authors' interests in environment where determinism is involved; Sorabji 1980: 143–81 has been especially influential on my reading of Vitruvius' place in a tradition.
18 See Kennedy, this volume.
19 See Irby, this volume.
20 Compare, e.g. Vitruvius, *Arch*. 1.1.3, 6 *Praef.*
21 See Yang, this volume, for parallels to Chinese environmental determinism, which attributes favourable climates with the ability to produce a greater number of such minds.
22 See, e.g. Varro, *Rust.* 1.11.2, 1.12.1–4, 1.14.1–4; cf. Cic. *Rep*. 2.5–10, 11. The emphasis on the dangers of some waters, and the significance of fortifications, connects all three.
23 In line with the (slightly earlier) Varro, *Rust*. 1.12.2 on the no-see-ums which make marshes unwholesome. As noted above, the Hippocratic *Airs, Waters, Places* is clearly part of a wider metanarrative in which civic form, identity, and technologies of healthfulness and pathology are interlinked. Vitruvius

talks again about misty humours at, e.g. *Arch*. 5.9.6, see section 'The role of the theatre', below. In general on this topic, Borca 2000: 76–82. On the acculturation of hydraulics, Purcell 1996.

24 Romano 2011, 4 uses this as one of the stories which best illustrate Vitruvius' exhortation that the architect must also be a historian.

25 On Diomedes in Italy, see Fletcher 2006 (with extensive references); Curchin 1996, 125 suggests how the name Elpias of Rhodes might have been created.

26 The forms Salpia and Salapia are both found. Gabba 1983 has proved particularly influential for this position. See Cic. *Leg. Agr*. 2.71.

27 Hannibal and the Salapian prostitute: Plin. *HN* 3.103.

28 E.g. App. *BC* 1.52. In the same campaign, Cosconius was also responsible for returning Cannae to Rome: a further strand highlighting Salpia's links with Hannibal.

29 See Spencer 2007, with bibliography. Other obvious and culturally significant sites with roots in mythohistory include the technocratic Cloaca Maxima/Shrine to Venus Cloacina (Bauer 1993; on the acculturation of which, van Essen 1956; Hopkins 2007). On Venus Cloacina in depth, Coarelli 1986, 184–9).

30 The distinctively Roman cast to this passage is pointed out by the juxtaposition of theatre and games, and the reference to men sitting with their wives, i.e. this is not about Athenians at the theatre.

31 Varro, *Ling*. 5.145; Vitruvius, *Arch*. 5.1.1–2 (on the forum as a venue for spectacle).

32 This volume's editors remind me that the scientific direction taken by Roman medicine in this era, and here favoured by Vitruvius, shifts from humoural systems favoured in Greek-speaking regions of the *Imperium* and privileges Roman preferences. Methodism, a theory developed by Greeks in Rome for a Roman market, fits neatly into Vitruvius' preferences for Roman leadership over Greek intellectual activity. That Methodism's binary model (constriction versus flux) is mirrored in the binary north–south axis of Vitruvius' zones (*Arch*. 6) could add weight to this reading.

33 Named from cartoon character Mr. Peabody's WABAC (way-back) machine from the Rocky and Bullwinkle show.

34 Following *ed. Ven*. (*prospectus*) rather than *H* (*profectus*).

35 Beare 1938 provides a lucid summary of the issues and texts, including how to mesh accounts in Vitruvius and Pollux. Poe 1993 acknowledges Beare's contribution, but sees Vitruvius' theatre as a resolutely Greek one, not speaking to Roman practice. Reading the text, however, Vitruvius' phrasing '*quae loca Graeci periactus*' assigns a 'here' versus 'there' quality, which suggests that his theatre is still envisaged in a Roman not Greek context (cf. *Arch*. 5.6.2). Moreover, at *Arch*. 7.5.2, Vitruvius connects Greek scene-painting with Roman architectural drawing and wall-painting (cf. *Arch*. 7 *Praef*. 11). On Roman theatre-construction and performance conditions, e.g. Goldberg 1998.

36 Livy 1.3.11–1.4.9 gives a sense of how the foundation story was coalescing in the late first century BCE. Livy (1.8.4–6) and Dionysius (2.15) specify the role of the Capitoline Asylum for attracting new citizens.

37 Lephas 1998 tackles Vitruvius' concept of perspective with a textual focus, but the most useful overviews are Christensen 1999 and Gros 2008.

38 Foucault 1986, 24.

39 See, e.g. O'Sullivan 2011, 77–96.

40 Dedicated by Pompey in 55 BCE; restored by Augustus in 32 BCE (*MonAnc* 20, where is it juxtaposed with restoration of the Capitolium)

41 Augustus name-checks the Theatre of Marcellus at *MonAnc* 22.

42 Rome's urban morphology restricted Augustus from producing a pleasant, healthful green-space as part of his Forum (even had he wanted to provide one; and Suet. *Aug*. 56.2 famously notes that the Princeps had wanted to buy up more land when planning his Forum but was unable to make it happen); arguably, Nero's Domus Aurea parkland was nudging at Vitruvian considerations, offering that healthful zone of ordered greenery on a grand scale. Vespasian's Templum Pacis included a planted-up portico court, a counterpoint to the temporary plantings of the faux-wild beast hunts and mythological stagings enacted in the Flavian Amphitheatre.

43 See, in the first instance, Vitruvius' opening summary statement (*Arch.* 1.1), and compare, e.g. *Arch.* 1.1.14.

44 Vitruvius, *Arch.* 1.4.9. The method was to undertake a series of observations of the livers of sacrificial animals who inhabited the proposed new foundation's environment; if the animals were healthy then so was their food and water, and vice versa.

45 Vitruvius, *Arch*. 1.1.11. Compare Varro, *Ling*. 5.8 reading *adytum*: in his scheme, this 'sanctuary' is the highest level of skill to which an etymologist can aspire. On Varro's *templum*, see Spencer (forthcoming).

46 See Cicero, *De Diuinatione* 1.48 (quoting Ennius, *Annales* 72–7), and on the topography, e.g. Wiseman 1995, 6–9, 112–13, but the sighting location of Romulus' augural *templum* continues to be debated.
47 Vitruvius, *Arch.* 1.6.1–3. Wind and water are not the only forces Vitruvius designs into service (or at least neutrality) for the well-planned town. Their relationship with urban morphology (streets, buildings, orientation) is crucial (e.g. 2.6 on the relationship between orientation and town planning, and, e.g. 1.2.5, 7–8, 1.4.1–2; 6.3–4 on house design and aspect.
48 Vitruvius, *Arch. 2 Praef.* 1 (*Fuerat enim amplissima statura, facie grata, forma dignitateque summa*).
49 Vitruvius, *Arch*. 2 *Praef*. 1–2. On Alexander as a Roman leitmotiv, see Spencer 2002.
50 The story crops up elsewhere, and clearly caught the imagination. See Plutarch, *Alexander* 72, writing in the early second century CE (calling the architect Stasicrates); cf. Strabo (Vitruvius' contemporary) 14.1.23 (calling the architect Cheirocrates, and making him the man who brought the work on Artemis' temple at Ephesus to completion). The story's anecdotal appearance in Vitruvius (addressing Augustus) as well as in Strabo (in the context of a beneficient piece of urban planning enacted by Augustus) suggests that it may have spoken to a developing appreciation of how environmentalism and autocracy were becoming entwined in Augustan Rome.
51 McEwen 2003, 92–112.
52 The comparability of Augustus and Alexander as patrons is a defining motif in Horace's verse-letter to Augustus (*Ep*. 2.1); see Spencer 2003.
53 Vitruvius, *Arch.* 2 *Praef*. 3.
54 On the afterlife of Alexander's man-mountain, Della Dora 2005.
55 The address *in propria persona* runs: "But to me, Imperator, nature has not allotted stature; age has marred my face; the state of my health has diminished my strength. And so since I am deserted by these defences, through the support of science and these writings (*per auxilia scientiae scriptaque*) I shall, as I hope, attain commendation" (*Arch. 2 Praef*. 4).
56 See Spencer 2002, 24–31, 193–6.
57 Soja 1996, 11.
58 See also Bosak-Schroeder, this volume
59 Compare Vitruvius with e.g. Lucretius 2.1105–174, 5.416–70; Sedley 1998: 186–93, *passim* traces the development of a Roman version of Epicurus' atomism and its significance for cultural politics in the later first century BCE. Epicureanism had a strongly empirical agenda which sits well with Vitruvius' insistence on the combination of learning, ingenuity, and experience in the ideal architect (cf. *Arch.* 2.1.6), and his interest in raw materials (e.g. *Arch.* 2.2, *passim*). The Lucretian cast to Vitruvius' imagined environmental catastrophe is shored up at *Arch.* 9 *Praef.* 17; there, the author indicates that what has been written and deliberated over is all the more valuable because it has had time to be scrutinised and interrogated.
60 The Latin runs: *non casas sed etiam domos fundatas et latericiis parietibus aut e lapide structas materiaque et tegula tecta perficere coeperunt* (Vitruvius, *Arch*. 2.1.7).
61 Vitruvius' choice of the Capitoline as the only cited location for the hut of Romulus should be read in the context of equal claims for a Palatine *casa*. Compare Dionysius 1.79, Plutarch, *Romulus* 20. Cassius Dio 48.43, 54.29 records the tendency of 'the hut of Romulus' to burn down. Cornell 1995: 51, 72, 93–7 sets this material in context.
62 See, e.g. Ovid, *Trist.* 3.1; Suetonius, *Aug.* 72.1.
63 For this motif, see Castriota 1995.
64 See Suetonius, *Aug.* 28–9; *MonAnc* 19–21. Vitruvius, *Arch*. 2.7 catalogues Italy's resources in construction stone.
65 E.g. Horace, *Carm*. 2.15.1–5, 2.18.20–22, 3.1.33–5.
66 Varro, *Rust*. 3 *passim*. See Spencer 2010: 80–85, with specific examples, and bibliography. For Vitruvius' respect for Varro's scholarship, e.g. *Arch*. 7 *Praef*. 14, 9 *Praef*. 17. Vitruvius devotes a chapter (6.6) to propriety in design and construction principles for the rustic property (the working villa); he emphasises that the scale of the villa ought to reflect the intended cultivation and the size of the farmland. The only concession to elegance in design is that so long as the practicalities are prioritised, symmetry (as for townhouses) may be a guiding principle.
67 Vitruvius, *Arch.* 2.6.1, 4. On the associated technologies, see now Jackson *et al.* 2014.
68 See, e.g. Edwards 1993, 137–49.
69 A further example is offered by the distribution of sandpits: within the Apennines' embrace, Italy and Etruria do have sandpits. The eastern side of Italy has none, while this natural resource is so alien to Achaia and Asia that no terminology exists (*Arch.* 2.6.4–5).

70 Vitruvius *Arch*. 8.3.26 sums up these key points, which the author has spent the chapter illustrating by way of a range of somatic examples, often with a literary bent.
71 Dionysius 1.79.8. Cf. Livy 1.4.4–6; Propertius 4.9, Ovid, *Fasti* 6.405.
72 Cic., e.g. *Rep*. 2.11; Varro, *Ling* 5.44. With extensive references, Larmour and Spencer 2007, 19.
73 Augustus' account, posthumously published, enumerates expansion of the Aqua Marcia and restoration of all Rome's aqueducts as among his Principate's defining features. Pliny the Elder directly linked the management and delivery of water via monumental and ornamental structures to the civic identity of Augustus' new Rome (*HN* 36.121).
74 McEwen 2003, 88.
75 Vitruvius, *Arch*. 1.4.12. More generally, see Spencer 2010: 100–101. On the Tiber's floods, Aldrete 2007 is comprehensive; I am persuaded that the politicised quality of floods and their religious dimension (e.g. Dio 39.61.1–2, 53.20.1, reporting on the flood which coincided with Ptolemy's restoration to Egypt in 54 BCE, and on prophetic interpretation of the 27 BCE flood as indicative of the heights to which Augustus' power might rise) combine with urban morphology and the economics of construction and public works programmes to create a cultural willingness to embrace periodic inundations. These incursions plug the cityscape back into its legendary topography, and manifest water's on-going ability to intervene dialogically in citizen experience.
76 Stambaugh 1988, 36.
77 E.g. Vitruvius, *Arch.* 8.3.4–6, 12–14.
78 Spencer 2010, 89–90 outlines the positive impact of human engineering whereby water becomes better than nature could offer unaided.
79 I am indebted to the editors for pointing me to Dioscorides (*De Materia Medica*); active in the mid-first century CE, Dioscorides' work (e.g. 5.9.103) suggests medical knowledge of lead toxicity. See Hodge 1981 (on Vitruvius and lead) and for an overview on lead poisoning in Rome, Cilliers and Retief 2014.
80 Vitruvius, *Arch.* 7 *Praef*. 10.
81 De Certeau 1984, 45–9.
82 Foucault 1986, 24.
83 *Uti totum corpus omnia architecturae membra in decem uoluminibus haberet explicata*, (Vitruvius, *Arch*. 10.16.12).
84 I am extremely grateful to this volume's editors: not only for the invitation to contribute to a timely debate but also for their acute and constructive feedback as part of the process of bringing the contributions together.

Bibliography

Aldrete, Gregory. 2007. *Floods of the Tiber in Ancient Rome*. Baltimore, MD: Johns Hopkins University Press.
Aldrich, Henry. 1789. *The Elements of Civil Architecture, According to Vitruvius and Other Ancients, and the Most Approved Practice of Modern Authors, Especially Palladio*, translated by P. Smyth. 2nd edn. Oxford: D. Prince *et al.*
Barchiesi, Alessandro. 2001. *Speaking Volumes. Narrative and Intertext in Ovid and Other Latin Poets*. London: Duckworth.
Bauer, Heinrich. 1993. "Cloaca, Cloaca Maxima." In *Lexicon Topographicum Urbis Romae* vol. I (A–C), edited by E.M. Steinby, 288–90. Rome: Quasar.
Beare, William. 1938. "Side-Entrances and ΠΕΡΙΑΚΤΟΙ in the Hellenistic Theatre." *Classical Quarterly* 32(3/4): 205–10.
Borca, Fredrico. 2000. "Towns and Marshes in the Ancient World." In *Death and Disease in the Ancient City*, edited by V.M. Hope and E. Marshall, 74–84. London: Routledge.
Boucher, Bruce. 2000. "Nature and the Antique in the Work of Andrea Palladio." *Journal of the Society of Architectural Historians*. 59(3:) 296–311.
Castriota, David. 1995. *The Ara Pacis Augustae and the Imagery of Abundance in Later Greek and Early Roman Imperial Art.* Princeton, NJ: Princeton University Press.
Christensen, Jesper. 1999. "Vindicating Vitruvius on the Subject of Perspective." *Journal of Hellenic Studies* 119: 161–6.

Cilliers, Louise. and Retief, Francois. 2014. "Lead Poisoning and the Downfall of Rome: Reality or Myth?" In *History of Toxicology and Environmental Health. Toxicology in Antiquity*, Volume I, edited by P. Wexler, 118–26. Amsterdam: Elsevier.

Clarke, Katherine. 2000. *Between Geography and History: Hellenistic Constructions of the Roman World*. Oxford: Clarendon Press.

Coarelli, Filippo. 1986. *Il Foro Romano, Vol. II: Periodo Repubblicano e Augusteo*. Rome: Quasar.

Cornell, Timothy 1995. *The Beginnings of Rome: Italy and Rome from the Bronze Age to the Punic Wars (c. 1000–264 B.C.)*. London: Routledge.

Curchin, Leonard. 1996. "Ptolemy and the Lost City of Eldana (Spain)." *Hermes* 124(1): 123–7.

De Certeau, Michel 1984. *The Practice of Everyday Life*, translated by S. Rendall. Berkeley: University of California Press.

DeLaine, Janet. 1995. "The Supply of Building Materials to the City of Rome." In *Settlement and Economy in Italy 1500 B.C. to A.D. 1500. Papers of the Fifth Conference in Italian Archaeology*, edited by N. Christie, 555–62. Oxford: Oxbow.

——. 2000. "Building the Eternal City: The Building Industry of Imperial Rome." In *Ancient Rome: The Archaeology of the Eternal City*, edited by J. Coulston and H. Dodge, 119–41. Oxford: Oxford University Press.

Della Dora, Veronica. 2005. "Alexander the Great's Mountain." *Geographical Review* 95(4): 489–516.

Edwards, Catherine 1993. *The Politics of Immorality in Ancient Rome*. Cambridge: Cambridge University Press.

Ergin, Gürkan. 2008. "Geography-Human Relationships in Ancient Sources: Some Remarks on Geopolitics and Environmental Determinism." In *Prof. Dr. Haluk Abbasoğlu'na 65. Yaş Armağanı EUERGETES Festschrift für Prof. Dr. Haluk Abbasoğlu zum 65. Geburtstag,* edited by İ. Delemen S. Çokay-Kepçe, A. Özdizbay, and Ö. Turak, 449–62. Antalya: Suna—İnan Kiraç Akdeniz Medeniyetleri Araştırma Enstitüsü.

Fletcher, Kristopher. 2006. "Vergil's Italian Diomedes." *AJP* 127(2): 219–59.

Foucault, Michel. 1986. "Of Other Spaces, Heterotopias." *Diacritics* 16: 22–7. http://foucault.info/documents/heterotopia/foucault.heterotopia.en.html = "Des espaces autres." *Architecture-Mouvement-Continuité* (October 1984).

Gabba, Emilio. 1983. "La Rifondazione di Salapia." *Athenaeum* 61(1–2): 514–16.

Goldberg, Sander. 1998. "Plautus on the Palatine." *JRS* 88: 1–20.

Gros, Pierre. 1997. "Vitruvio e il suo Tempo." In *Vitruvio. De Architectura,* edited by A. Corso and E. Romano, 9–77. Turin: Einaudi.

——. 2008. "The Theory and Practice of Perspective in Vitruvius's *De Architectura*," In *Perspective, Projections and Design Technologies of Architectural Representation,* edited by M. Carpo and F. Lemerle, 5–18. London: Routledge.

Hardie, Philip. 1986. *Virgil's Aeneid: Cosmos and Imperium*. Oxford: Clarendon Press.

Hodge, Treavor. 1981. "Vitruvius, Lead Pipes and Lead Poisoning." *American Journal of Archaeology* 85: 486–91.

Hopkins, John. 2007. "The Cloaca Maxima and the Monumental Manipulation of Water in Archaic Rome." *The Waters of Rome* 4: 1–15.

Jackson, Marie. and Marra, Fabrizio. 2006. "Roman Stone Masonry: Volcanic Foundations of the Ancient City." *American Journal of Archaeology* 110(3): 403–36.

Jackson, M.D., E.N. Landis, P.F. Brune, M. Vitti, H. Chen, Q. Li, M. Kunz, H.-R. Wenk, P.J.M. Monteiro, and A.R. Ingraffea. 2014. "Mechanical Resilience and Cementitious Processes in Imperial Roman Architectural Mortar." *Proceedings of the National Academy of Sciences* 111(52): 18484–9.

Kronenberg, Leah. 2009. *Allegories of Farming in Greece and Rome: Philosophical Satire in Xenophon, Varro, and Virgil*. Cambridge: Cambridge University Press.

Larmour, David. and Spencer, Diana. 2007. "*Roma, Recepta*: A Topography of the Imagination." In *The Sites of Rome: Time, Space, Memory,* edited by D.H.J. Larmour and D. Spencer, 1–60. Oxford: Oxford University Press.

——, eds. 2007. *The Sites of Rome: Time, Space, Memory*. Oxford: Oxford University Press.

Lephas, Pavlos. 1998. "On Vitruvius' Concept of Scaenographia." *Numismatica e Antichità Classiche* 27: 261–73.

McEwen, Indra. 2003. *Vitruvius: Writing the Body of Architecture*. Cambridge, MA: MIT Press.

Nicolet, Claude. 1991. *Space, Geography and Politics in the Early Roman Empire*. Ann Arbor: University of Michigan Press.

O'Sullivan, Timothy. 2011. *Walking in Roman Culture*. Cambridge: Cambridge University Press.
Poe, Joseph. 1993. "The ΠΕΡΙΑΚΤΟΙ and Actors' Entrances." *Hermes* 121(3): 377–82.
Purcell, Nicholas. 1996. "Rome and the Management of Water: Environment, Culture and Power." In *Human Landscapes in Classical Antiquity: Environment and Culture,* edited by G. Shipley and J. Salmon, 180–212. London and New York: Routledge.
Raaflaub, Kurt. and Talbert, Richar. (eds.) 2010. *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies*. Chichester: Wiley-Blackwell.
Romano, Elisa. 2010. "L'Architettura e i suoi Autori." *Technai* 1: 121–32.
——. 2011. "Vitruvio fra Storia e Antiquaria." *Cahiers des Études Anciennes* 48: http://etudesanciennes.revues.org/326.
Romm, James. 2010. "Continents, Climates, and Cultures: Greek Theories of Global Structure." In *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies,* edited by K. Raaflaub and R. Talbert, 215–35. Chichester: Wiley-Blackwell.
Sedley, David. 1998. *Lucretius and the Transformation of Greek Wisdom*. Cambridge: Cambridge University Press.
Soja, Edward. 1996. *Thirdspace. Journeys to Los Angeles and Other Real-and-Imagined Places*. Cambridge, MA: Blackwell.
Sorabji, Richard. 1980. *Necessity, Cause, and Blame: Perspectives on Aristotle's Theory*. Ithaca, NY: Cornell University Press.
Spencer, Diana. 2002. *The Roman Alexander: Reading a Cultural Myth*. Exeter: University of Exeter Press.
——. 2003. "Horace and the Company of Kings: Art and Artfulness in *Epistle* 2, 1." *Materiali e Discussioni per l'Analisi dei Testi Classici* 51: 135–60.
——. 2007. "Rome at a Gallop: Livy, on Not Gazing, Jumping or Toppling into the Void." In *The Sites of Rome: Time, Space, Memory,* edited by D.H.J. Larmour and D. Spencer, 61–101. Oxford: Oxford University Press.
——. 2010. *Roman Landscape: Culture and Identity*. Greece & Rome New Surveys in the Classics 39. Cambridge: Cambridge University Press.
——. 2015. "Urban flux: Varro's Rome-in-progress." In *The Moving City. Processions, Passages and Promenades in Ancient Rome,* edited by I. Östenberg, S. Malmberg, and J. Bjørnebye, 99–110. London: Bloomsbury Academic.
——. 2015 (forthcoming). *Varro's Guide to Being Roman: Reading De lingua Latina*.
Stambaugh, John. 1988. *The Ancient Roman City*. Baltimore, MD: Johns Hopkins University Press.
Talbert, Richard. 2010. "The Roman Worldview: Beyond Recovery?" In *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies,* edited by K. Raaflaub and R.J.A. Talbert, 252–72. Chichester: Wiley-Blackwell.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science and the Art of Persuasion*. Cambridge: Cambridge University Press.
Van Essen, Carel. 1956. "Venus Cloacina." *Mnemosyne* 9(2): 137–44.
Wallace-Hadrill, Andrew. 2008. *Rome's Cultural Revolution*. Cambridge: Cambridge University Press.
Wiseman, Timothy. 1995. *Remus: A Roman Myth*. Cambridge: Cambridge University Press.

11

TRIBAL IDENTITY IN THE ROMAN WORLD

The case of the Psylloi

Molly Jones-Lewis

A complex web of intersecting identities and nationalities made up the people of the ancient Mediterranean basin.[1] However, these various cultural groups are often known to us only through the distorting lens of the Greek and Roman source material in which they survive, limiting our ability to discuss with any certainty their existence aside from their relationship with the Greeks and Romans who studied, ruled, and (likely) enslaved them. And yet, this is precisely the task this chapter undertakes in discussing the place of the Psylloi, a *genos* originating in ancient Libya, whose destiny was in many ways shaped by the theoretical assumptions of Greek ethnographers and the Roman military.[2] Early on, they acquired a reputation for being not only born immune to poisonous bites, but being able to drive off poisonous creatures and cure bite victims using various forms of physical contact, combined with pharmaceutical treatments and preventative measures. This reputation was not unique to them,[3] nor were they the only *genos* to be associated with snakebite immunity: the Ophiogenes of Parium and Cyrene, as their name suggests, were also credited with such immunity, as were the Italian Marsi.[4] However, the abilities ascribed to the Psylloi seem particularly broad in their scope and impressive in their results. This willingness to believe in the powers of the Psylloi was driven by the preferences and theoretical models of the educated Roman elite, which were, in turn, based on the assumptions of the scientific authors of the time that environmental origins create real and powerful differences in human bodies. In the case of the Psylloi, they were the right group in the right place at the right time to dominate a fruitful portion of the Roman medical marketplace.

Libya, environmental determinism, and the Psylloi

The story of the Psylloi properly begins with the earliest surviving accounts of Libya in Greek authors' work.[5] Herodotus, who (along with Democritus of Abdera) is also one of our earliest sources for the Psylloi, identifies the region with sand and wild beasts (4.181), specifically snakes (4.183.4, 4.192.2). The heat and sandiness certainly dominate descriptions of the region, but the particularly potent venomous animals are mentioned regularly, often in conjunction with the Psylloi themselves.[6] There is good reason for this due to the concentration of particularly venomous creatures in this desert region, including several species of venomous snakes and scorpions. Venomous reptiles and insects in the Mediterranean Basin

cluster in dry, hot regions, and there are more of them, with fewer opportunities for prey, in North Africa than there are in mainland Greece. Although modern statistics for envenomed bites should be used with caution, they are consistent with the impression given by ancient sources that the incidence and severity of bites and stings increases in North Africa in comparison to Europe.[7] At the same time as the nomadic peoples of Libya were being named and organized in Greek ethnography, so too were rationalizing theories of human difference in development. Environmental determinism—that is, the idea that the character of the land is related to the physical properties of the inhabitants of that land—is prevalent in Herodotus' narrative.[8] Although he is one of the few sources not to connect the Psylloi and snakes, he is clear in his articulation of the theory that *Ek tōn malakōn chōrōn malakous gignesthai* ("Soft lands give birth to soft men," *Hdt.* 9.121.3) which attitude is persistent in constructing the reputation of the Psylloi in other ethnographers. The primary difference is that, in the case of the Psylloi, venomous lands give birth to *anti*venomous people rather than *venomous* people; this variation on the theme was to prove very convenient for subsequent generations of Psylloi.

The Psylloi were known to the Greeks fairly early on, appearing in Herodotus as an aside in his discussion of the Nasamones in Libya. This passage, from the last half of the fifth century BCE, may possibly be the earliest mention of the Psylloi in Greek literature:[9]

> Neighboring the Nasamones are the Psylloi, and they were driven out in this way: the south wind blew and dried up their water stores, and their entire land which was entirely within the Syrtis[10] was without water. And so, after making a plan in open council, they marched off to the south (I tell this as the Libyans relate it), and when they got into the sands, the south wind buried them with its blowing. And so they all died, and the Nasamones now hold their territory (Hdt. *Hist.* 4.173).[11]

Herodotus' account does not include any mention of special abilities, but does indicate that the Psylloi were established as one Libyan tribe among several in the region of Cyrene. Likewise, his portrait is tied to the sandy, hot, windy character of the land, though in this case, he does so only to immediately kill them off, leaving the stronger Nasamones in their place.[12] However, there is another fifth-century source with a different account, and this is the one that prevails in the Greek record. Democritus of Abdera,[13] roughly contemporary to Herodotus, mentions the Psylloi as part of a longer discussion of the North African horned viper, and here we first see the connection of the Psylloi to the Libyan land *and* the Libyan viper (Aelius Promotus *Peri tōn iobolōn thēriōn kai dēlētēriōn pharmakōn* 27, DK 68 B7a):[14] "Democritus tells the following: "[The *kinadēs*, possibly a horned viper] is found in those parts of Libya near Cyrene, where a *genos* of men called the Psylloi originate (*tiktetai*). The bites of the *kinadēs* are healed (*therapeuetai*) by the Psylloi."[15]

The passage, read in the context of the interests of rationalising authors of the fifth century BCE, seems well in keeping with more clearly articulated cases of environmental determinism, though it does not specifically articulate a cause for the Psylloi's abilities.[16] There is a strong thematic tie between the characteristics of the land (hot, harsh) and the creatures, both reptilian and human, that are native to it.[17] Indeed, the similarity between the burning sensation of the hot Libyan sun and the burning sensation of an envenomed viper bite does not seem to have been lost on later writers.[18] However, by that logic, one might expect the human inhabitants, like the reptilian, to be venom*ous* rather than *immune* to venom;[19] this is not the case. Rather, in this instance, the affinity of the inhabitant for the land results in an inhabitant better equipped to survive in that land, in an almost proto-Darwinian fashion.

The focus of the passage is *not* on human difference, though, but rather on the animal. The Psylloi, therefore, are introduced to Greek scientific literature as one of several defenses against a species of snake (a list that goes on to include a tame weasel, written as "*gallia*"),[20] and it is this legend that forms the basis of their future reputation among Greek writers. The logic of environmental determinism is at play, but at a less conscious level that might have been the case had Democritus been writing ethnography when he mentioned the Psylloi.

Hellenistic developments

In the Hellenistic period, a time of general expansion of Greek science, the abilities of the Psylloi continue to be discussed in the tradition of Democritus with some elaborations. No one in this period seems to follow Herodotus' tradition of the lost tribe, but rather the sources discuss the Psylloi as if they are a living part of the Libyan landscape. The surviving Hellenistic accounts come from three authors: Callias of Syracuse, Nicander of Colophon, and Agatharchides.[21] Callias of Syracuse, a biographer of the third century BCE, echoes Democritus' content about the dangerousness of Libyan snakes, but rephrases the comment about the Psylloi to a more vivid, "for [horned snakes] kill both speechless animals and men, if a Libyan man is not there who is from the Psylloi tribe."[22] As with Democritus, the nature of the Psylloi is not so much at issue as is the dangers of the snakes; the Psylloi dramatically punctuate the dangers of Libya, but Callias also spends time discussing their treatment technique, thus balancing the danger of horned snakes with the local remedy of the anti-venomous people. This course of treatment is echoed in a fragment of Nicander of Colophon, a naturalist of the second century BCE whose poems on poisonous animals and antidotes still survive. But Nicander goes farther than Callias in defining the relationship of Psylloi to Libyan soil (Ael. *NA* 16.28):

> And I bring Nicander of Colophon also as a witness to this [phenomenon], who says: "I have heard how the tribe (*genos*) of the Psylloi of Libya themselves do not succumb to any poisoned bites of beasts (*mudaleēisi tupais*),/ beasts which the sand-bearing Syrtis nourishes, and they also/ Keep other men safe as well from dire bites,/ Not by using root-based draughts (*ou rhizas ardontes*), but by the close-pressed flesh of their own limbs (*heōn d' apo sugchroa guiōn*) . . . ." And the things he says after that too.

Nicander more deliberately articulates a physical connection between the Psylloi and their environment than Democritus and Callias when he pauses to point out that the Syrtis nourishes both snakes and Psylloi. To this, he adds the key detail Democritus left out: the ability of the Psylloi to cure is in their physical nature, and not due to specialized local knowledge. This presents a logistical problem in sharing their ability with others that is solved by contact. Here, the logic informing the treatment bears similarities to the principle of contagion, which is normally associated in modern theory with magic: the properties of one object are conveyed by placing it in close contact with another, thus transferring the healing energy. However, contagion seems to have frequently been a part of even the most rational medical authors' range of cures,[23] likely due to the fact that many treatments relied on putting medications in contact with the skin in the form of poultices and ointments. If applying herbs to a bite could cure, could not applying a Psyllian body do likewise? It is this very logical process that Nicander promotes, rejecting one form of treatment-by-contagion (*rhizas ardontes*) for another (*heōn d' apo sugchroa guiōn*).

It is with Agatharchides, a geographer of the second century BCE, that the theories on which the phenomenon of the Psylloi rested find their clearest articulation. Fortunately, he survives in two sources rather than one, quoted by both Aelian and Pliny the Elder.[24] The two diverge slightly in emphasis and detail as well as in language, muddying what Agatharchides might have originally said.[25] Pliny, who includes the Psylloi in his chapters about human nature, is accordingly focused on the bodies and customs of the Psylloi, where Aelian, writing (overtly) about animals and their behavior, focuses on Agatharchides' snake-lore.[26] Both accounts begin by naming the Psylloi and discussing their special bodies and abilities: Pliny's version explains that the Psylloi are born with an anti-snake venom in their bodies (*corpori ingenitum fuit virus*), while Aelian's says only that the Psylloi have a different and incredible body (*xenon te kai paradoxon*) that cannot be harmed by any venomous creature (*mēden autous monous adikein*). Where Aelian only says that the smell of a Psyllos is able to tranquilize a venomous creature, Pliny claims that the "inborn venom (*ingenitum virus*)" has a smell that puts venomous creatures to sleep, but is also "lethal (*exitale*)" to serpents. Both include a major element of Psylloi lore, frequently repeated in later sources: Psylloi infants are exposed to venomous snakes as a test against adultery. If the snakes fail to harm the infant, the infant is deemed legitimate.[27]

The nature of the Psylloi is further refined in Agatharchides, but *how* refined is difficult to say, given the differences in how Pliny and Aelian account for the mechanics of Psyllian immunity. It is clear, though, that Agatharchides, like Nicander, thought of it as a function of an unusual kind of human body. Moreover, the new story of Psylloi testing their children's legitimacy distances that bodily nature from the environment itself, adding the complication of heredity to the mechanics of Psyllian immunity. It is the relationship to snakes inherited through the male line and *not* simple geographical location that grants the Psylloi their powers. The persistence of Libya as an adjunct to "Psylloi," then, cannot be taken as a clear and definite result of deliberately applied environmental determinism. However, the environmental connection is preserved persistently in all the source material in such a way that suggests Libyan identity and origin is more than just an incidental element to Psylloi identity. It argues for an inheritance determined by factors *both* environmental and hereditary.[28]

Taken together, the testimonia of Callias, Agatharchides, and Nicander suggest that the Psylloi were well established in the Greek scientific tradition by the second century BCE, and that their special powers were being constructed as linked both to Libya's environment and the Psylloi's rare bloodline. How their bodies came to be so unusual is not defined by any of these authors; environmental influences are implied, but never articulated in the way that they were for groups claiming autochthonous birth. That said, contemporary theories that linked blood and environmental influences to heredity informed and shaped the story of the Psylloi, giving them a place in Hellenistic scientific literature. While one can imitate a local practice, one cannot reproduce a local body with non-native parents. Thus, the Psylloi (or Libyans savvy enough to claim to be Psylloi) were perfectly positioned to provide an invaluable service to outsiders educated in Greek literature visiting North Africa.

The Psylloi and Cato's army

The majority of surviving authors who mention the Psylloi date from the Roman-dominated world of the first century BCE–third century CE. There is also a shift in tone from the Greek ethnographer discussing the abilities and habits of remote peoples known only by reputation to that of people who have had personal contact with people claiming to be the Psylloi of legend. This suggests that a group being identified as 'Psylloi' was an active part of a trade

in poison cures flourishing under the *Pax Romana*.[29] All of this seems to begin with stories of the younger Cato's activities in North Africa during the Civil Wars. Indeed, Lucan and Plutarch both mention the participation of the Psylloi in Cato the Younger's Libyan campaign as poison control specialists, and Lucan goes so far as to suggest that the Psylloi came forward to offer their services to the general, as an alternative to being taken as captives and forced to participate.[30]

Cato is not alone among intellectual politicians of the Late Republic to be reported to have employed Psylloi; Suetonius speaks of Octavian calling for the Psylloi to revive Cleopatra VII after her suicide.[31] Indeed, there is good evidence that educated Romans of the first century CE would have known about the Psylloi and sought out their services while in North Africa. A fragment of the poet Cinna survives in which the Psylloi's ability to charm snakes is discussed,[32] and a fragment from Varro repeats the story about Psylloi infants being exposed to snakebites.[33] Finally, Strabo, writing during the reigns of Augustus and Tiberius, refers to the Psylloi four times: three without commenting on their reputation for poison curing,[34] and once in order to explain the abilities of another tribe with the power to cure snakebites (Strab. *Geog.* 13.1.14): "[The Ophiogenes] say that the founder of the tribe (*tou genous*) was a certain hero (*hēroa tina*) who changed from a snake: perhaps he was one of the Psylloi of Libya, and the power (*hē dunamis*) passed to the tribe for a time."

From this, we can reason that in Strabo's day, the Psylloi were well enough known that he felt no need to explain what he means by "the power (*hē dunamis*)"; he assumes that his audience is well aware of the connection between Psylloi and snakes. It is therefore likely that Suetonius and Plutarch's account of the presence of Psylloi in the retinue of two Roman elites is reliable, and we can date the participation of the Psylloi in the larger Mediterranean medical marketplace to this period. Indeed, it may be this association with Roman elites that first gave Psylloi tribesmen the idea of expanding their services away from Libya and into Italy.

The Psylloi in the medical marketplace of the Roman Empire

By the mid-first century CE, the Psylloi were definitely active in Italy and Greece as part of the medical community. Most authors of the imperial period repeat the basic information found in the Hellenistic sources, but discuss the Psylloi themselves not only as a phenomenon of human variation, but also as active participants in the Roman world and common providers of treatment in cases of envenomation.[35] Pausanias best illustrates this shift in tone when discussing resources for poison cures that a traveler in Greece might feasibly have access to should he or she be bitten by local serpents (Pausan. 9.28.1):

> Those living around Helicon say that all the herbs and roots are the least likely to bring about death for a person, and moreover they make the snakes that go up there less potent than usual[36] so that for the most part those who get bitten survive, if they happen to have handy a Libyan man of the Psylloi tribe (*ēn andri Libyi genous tou Psyllōn*) or some other useful drugs.

Such off-hand references to Psylloi plying their trade is typical of sources even earlier than Pausanias, beginning with Strabo's casual reference mentioned above and continuing through Celsus and Pliny the Elder.[37] Indeed Celsus, a medical author roughly contemporary to Tiberius, mentions the Psylloi with minimal explanation, implying not only that their abilities are known to his audience, but that they are common enough to merit a cautionary word undercutting their practices (Celsus, *Med.* 5.27.3):

> And those who are called Psylloi (*qui Psylli nominantur*) do not own this knowledge [of treating venomous bites] in any special way, but they have a boldness (*audaciam*) reinforced by practice itself . . . Therefore, whoever should suck out the wound in imitation of the Psylloi will himself be safe and will make the patient safe as well.

One can see in Celsus' refutation of the Psylloi's special nature as a resistance to the logic of environmental determinism itself, though he does not reference the theory in his surviving works. Celsus' interest, however, is in shaking the Psylloi's place in the medical milieu of Rome at its very root by eschewing one mode of theory (environmental determinism) for another (skill honed by practice). This resistance can be found elsewhere in Imperial Roman authors as part and parcel with Roman resistance toward theories put forward by Greek authorities,[38] but it is by no means a resistance representative of the majority of the sources. As we shall see, even Pliny the Elder, notorious for his distrust of foreign (especially Greek) intellectual physicians, is content to accept the notion that the Psylloi are, indeed, uniquely able to counter poison.[39] Here, Celsus is a skeptical outlier. The most likely scenario is that the Psylloi somehow found a way to turn their Othered status in Greek ethnography into a profession. But why did only Celsus raise objections when the Imperial Roman medical marketplace was so competitive? The answer lies in the nature of envenomation and the kinds of remedies, physical and psychological, that the Psylloi used.

The techniques and therapeutic approach of the Psylloi

The success of the Psylloi in the highly competitive medical marketplace of ancient Rome cannot be examined solely in terms of contemporary scientific theories and common belief. The methods by which they plied their trade are key to explaining their remarkable success and ability to maintain a coherent identity within a culturally fluid context. There is some minor disagreement in the sources as to how the Psylloi cured their patients, but these are relatively insignificant variations considering the time and space during which the Psylloi lived and made a living. Aelian, quoting Callias' earliest account of Psyllian treatment, describes the Psylloi using sputum as both a topical agent and a medicinal drink, then applying skin-to-skin contact (Ael. *NA* 16.28):

> Callias in his tenth book about Agathocles of Syracuse says that this is a sign that the horned snakes have a terrible bite: for they kill both speechless animals and men, if a Libyan man is not there who is from the Psylloi tribe (*ei mē pareiē Libys anēr, Psyllos ōn to genos*). For if this man, whether he comes to a summons or happens to be there by chance, should see that it [the bite] is but mildly painful, by only spitting on the bite he then numbs the pain, and washes out the danger with spit. But if he finds the victim doing poorly and bearing up in pain, he gulps a lot of water behind his teeth and uses it as a rinse for his mouth, then he spits it into a cup and gives it to the victim to drink up. And if the evil grows even stronger after this drug is given, he lies naked against the naked patient, and using the native strength of his own body (*tou chrōtos tou idiou prosanatripsas*) he breaks the strength of the poison, and then has made the man oppose the evil.

Although such a procedure may seem to modern eyes unsanitary and quasi-magical, it is based on ideas grounded in Greek rationalizing theory. The physical nature of the Psylloi is not mystical, but a result of their kinship with a land full of heat and poison. Therefore, both

their bodies and body fluids could transfer that power (Pliny's *exitale virus*) to the patient, thus sharing with that patient the physical property that Psylloi have naturally. The Psylloi, then, should not be understood as a magical people, but rather as a *natural* human variation, directly resulting from the unique environment in the Cyrenaica. By ancient Greek scientific logic, the Psylloi and their methods constitute a rational treatment option.

However, by the first century CE and in the hands of Roman intellectuals, the procedure has become more elaborate and more surgical. In fact, Celsus' description of the techniques of the Psylloi reads much like the advice given in wilderness medicine manuals of the mid-twentieth century: the wound is sucked to remove the venom from the patient (Celsus *Med.* 5.27.3):

> For the poison of the serpent, just like certain hunter's poisons also, especially those which the Gauls use, are not poisonous to the taste, but in a wound. For that reason a snake itself can be eaten safely while its bite kills; and if someone puts a finger into its mouth while the snake is tranquilized (an effect that traveling showmen create using certain drugs) and he is not bitten, there is no harm in the snake's saliva. Therefore, whoever should suck out the wound in imitation of the Psylli will himself be safe and will make the patient safe as well. But, so he does not die, he ought to check first that he does not have an ulcer in his gums or palate or any part of his mouth.

Celsus takes great pains here to differentiate a snake's saliva from its venom and to keep his advice practical. Although it is unclear whether Celsus was himself a practicing physician, he certainly writes with accuracy and confidence about general medicine and surgery in a way that requires direct experience of a variety of conditions and procedures. For instance, Celsus quite correctly warns against sucking a snakebite with a cut or ulcerated mouth, since this has a possibility of poisoning the caregiver. Although he was using older authorities in the same way as Aelian was, his purpose is entirely different because it focuses on medical advice rather than on the abilities of animals; Aelian, though certainly familiar with many of the animals he discussed, was not writing instructions for treating snakebites. It is possible that the addition of sucking was a necessary addition to an older regimen of body fluid exchange, adding mechanical means (extraction) to the mix. Taking such measures would increase the credibility of the Psylloi for patients skeptical of the power of Psyllian bodies to heal, but it would also open the Psylloi's techniques to imitation (as Celsus is doing here). Anyone can suck on a wound; it is Libyan nature and the model of environmental determinism that secures the Psylloi's hold on their patients. Celsus avoids explicitly rejecting the environmentally determined rationale for the Psylloi's difference by focusing on the procedure they follow, but is still notable for his resistance to the idea and the Psylloi.[40]

Lucan's description is by far the most detailed description of Psyllian methods—detailed to the point of sensationalism and (possibly) creative embroidery of simpler methods.[41] Not only does he address methods for deterring venomous creatures alongside the direct treatments of envenomated victims, but he also includes the socio-political context in which such measures would be taken. While he is writing an epic about Cato's campaigns of 48–46 BCE, the procedures he describes may very well have been used by the Psylloi on campaigns of the 60s CE. First, the preventative measures (Luc. 9.909–22):

> Nor is that tribe content only in its own safety:
> It keeps watch for guests, and against harming monsters
> a Psyllos (*Psyllus*) stands ready for people. . . .

> First, he cleanses the sands which the space of the valley encircles with
> a song and with words for setting snakes to flight.
> Drugged fire has circled the boundaries of the camp.
> Here dwarf-elder hisses, and imported Syrian galbana sizzles,
> And tamarix unhappy in its fronds, and eastern costum,
> and powerful panacea, and Thessalian centaurea:
> Hog's fennel crackles in the flames, and Erycinian thapsos;
> And they burn larch and Abrotanus that is dire with smoke
> to serpents, and the antlers of a deer born far away.
> Thus the night is safe for the men.

First, the Psylloi create a barrier of chanting combined with herbal smoke—a two-fold process that may have had some effectiveness in repelling snakes, who hunt primarily by scent—and may have also had some effectiveness against scorpions by driving off their prey. Cedar oil is still used to repel scorpions, and Lucan's account includes aromatic sap and wood that may have had a similar effect. Antler, when burnt, has an incredibly foul odor and produces a heavy, ground-hugging smoke. The combination of these materials in smoke form would have made even the most foul-tempered viper take a detour around the camp. The choice of materials (assuming, for the sake of argument, that the Psylloi were in charge of such things) is also made with an eye toward the tastes of educated Roman elites.[42] The herb centauria is *Thessalian*, evocative of the associations made by educated elites between Thessaly and witchcraft, but it is also a staple of ancient pharmacy (Dioscorides 3.6).[43] Syrian and Erycinian plants add an air of both exoticism and power; this is not a cheap, easily obtained recipe and its use is a display of fiscal and geographic power.[44,45] The entire barrier is symbolic of empire and Roman domination, down to the way in which the Psylloi volunteer to aid Cato as 'friendly' and altruistic foreigners who recognize Roman superiority when they see it. Of course, the Romans may have looked more like a wealthy customer to the Psylloi than Lucan's text implies. However the Psylloi may have perceived their initial services to the Roman army, the description of local specialists enlisted to aid the Roman war effort fits neatly into the practices of the time.

For those unlucky enough to be bitten, Lucan's Psylloi yet again combine magical showmanship with a combination of topical saliva, chanting, sucking, and licking. This account combines all of the treatments mentioned in other sources and more, but it still falls in line with what could be expected by their target demographic of Roman elites (Luc. 9.922–37):

> . . . But if someone is doomed to the daily pestilence,
> then there are the miracles of the magic tribe,
> the great battle of the Psylli over poison once taken.
> For first he covers the bitten limbs with saliva,
> so it may halt the venom, and it holds the disease in the wound.
> Then he rolls many incantations on his foaming tongue with
> a constant muttering, nor do they give respite to the course of the wound,
> nor do the fates allow even the shortest pause.
> Indeed often the black disease driven into the marrow
> flees when it's sung out: but if the poison hears it more slowly,
> and fights back when it's called out and ordered to go,
> then he licks the lived wounds while lying above the victim,
> drawing out the poison with his mouth, and with his teeth he sucks the limbs dry,
> and holding the death drawn from the body,

> he spits it out: and the snake whose bite overcame [the victim] now is easy for the Psylli to recognize from the poison's taste.

It is more than likely that the kind of showmanship and the use of ritual words and formulae described by Lucan formed an important and possibly helpful element of treatment.[46] The very fact that this people was a tribal group outside of Greco-Roman culture contributed to its marketability, and it was not without competition in the form of other *genoi* with a reputation in Greco-Roman science for poison immunity. One of the more interesting moments in Lucan following the introduction of the Psylloi is one in which a soldier from the "Marsian fields" is a *victim* of snakebite;[47] the inhabitants of this part of Italy were thought, like the Psylloi, to have a natural immunity to snakebite and would often work as specialists in treating venomous bites.[48] To have one of the Marsi lacking the ability for which this people was known (and also employed) shown in close proximity to powerfully effective Psylloi deeply reinforces the superiority of the Psylloi's environmentally determined abilities.

How effective would these measures be in treating snake and scorpion bites? Incision and sucking has been a common first aid procedure for centuries, but has been removed from the modern standard of care for such bites. The punctures of venomous animals deliver the poison too deeply into the spongy tissue of muscle and skin for suction to remove anything but a small portion of the venom. Moreover, cutting and sucking often cause further injury to the compromised tissue and there is a sharply increased risk of necrosis. Incision and sucking could turn the loss of a finger into the loss of a limb—or a life—to gangrene. Interestingly, the Psylloi are described as sucking (as opposed to licking or washing) only by Celsus (*exsuxerit*) and Lucan (*Ore venena trahens, et siccat dentibus artus*), and Lucan's inclusion of "*dentibus*" in the sucking process suggests that the sucking was not done with lips sealed to the wound, but rather through the teeth. Such a process would limit the bruising caused by suction, though it would do little to actually remove poison. Nowhere is it said that Psylloi cut into the wounds. In this way, the Psylloi and ancients who imitated them would be using better practices than many mid-twentieth-century first aid specialists.

The licking and spitting presents another action with the potential to affect the snakebite's outcome. Human saliva contains enzymes formulated to break down organic compounds in a mild digestive process, and might have been able to accelerate the break-up of the poison in a wound. However, snakes inject venom deep into the bitten tissues and the venom spreads quite quickly away from the open wound; saliva applied topically cannot travel fast and far enough to overtake and break down venom. On the other hand, human mouths contain bacteria so nasty that human bites can be just as dangerous to other humans as a snake's, if antibiotics are not administered. And so the Psylloi might introduce infection into the original puncture wound, thus adding infection to poisoning. Taken as a whole, the salivary portion of Psyllian bite treatment would have been slightly counterproductive.

However, keeping the patient calm and immobilized is still considered good treatment practice in bites and stings. Modern treatment prioritises keeping the patient still in order to keep the venom from spreading into the central circulatory system; the slower the heart beats, the better the chances that the venom's effects will stay localized to the bitten tissue. The part of Psyllian treatment that seems least rational to the modern viewer—the use of chanting and ritual—may be the most effective part of their intervention. To a patient who already believes that he is in the hands of a healer with special powers, the added ceremony and chanting would only enhance the therapeutic calm. The physical proximity of body-on-body would encourage even breathing and relaxation, possibly even limiting the twitching and seizing that sometimes results from envenomation. Ritual, chanting, and even 'magic'

saliva could all combine to keep a patient's panic from exacerbating the damage done by the initial bite or sting.

And that damage would frequently be negligible. Often bites are 'dry bites,' or bites given without the injection of a full load of venom; a snake who has bitten prey recently has less venom to secrete, and since humans are too big to eat, the snake will be acting out of self-defense and have little reason to waste poison. Young snakes are more dangerous not because their poison is any more potent, but because they have not yet learned to control the amount they inject when biting prey too large to ingest. It is rare to be snake-bitten badly enough to die. In fact, over half of venomous bites resolve without any medical intervention at all, and that is combining statistics from the Americas and Australia.[49] European, Middle Eastern, and North African species of snake and scorpion are nowhere near the world's most deadly, though the symptoms such bites would be painful and alarming to travelers unfamiliar with them.[50] This makes snakebite and scorpion sting victims a very attractive group of patients for an ancient physician; the Psylloi had been given (or claimed) a prime portion of the ancient medical marketplace. Their competitors, who might compound the damage of bites with overly aggressive theriac drugs, may very well have suffered in comparison to the Psylloi's spittle-and-ritual approach.[51] When their patients lived, the Psylloi would have been credited with a miraculous cure, and their reputations thus confirmed would lead them on to other patients. Indeed, a specialty with such a high natural survival rate is a perfect choice of vocations for a medical practitioner in antiquity, and it is easy to see how Greeks and Romans ready to believe that human bodies from other parts of the world had unusual powers would see the results and believe.

The Psylloi in Roman society

Finally, there is the question of what position the Psylloi occupied in Roman society. Were they accidental beneficiaries of the Greek scientific tradition and the way the ruling elites of the day perceived them, or did they actively maintain a group identity in order to capitalize on their reputation and make a business of treating poisonous bites? There is some intriguing evidence that the latter, more active, approach best reflects the sparse evidence for the Psylloi as medical professionals in the first centuries CE. Pliny the Elder gives us two anecdotes outside of Lucan's sensationalized account that show the Psylloi in action. First, there is this report:

> Often the Psylloi, who, by importing poisons from other lands, have filled Italy with foreign evils in pursuit of their own agenda (*quaestus sui causa*), and they have tried to import these [flying scorpions] too, but they were not able to survive above the latitude of Sicily. However, they are spotted from time to time in Italy, but they are harmless there; and they are seen in many other places, like in the region (*circa*) of Pharos in Egypt (Plin. *HN* 11.89).[52]

This tells us that the Romans at least suspected the Psylloi of drumming up business by attempting to transplant creatures whose bites they could treat to areas where they presumably wanted to treat patients. If this account is true, it suggests that the Psylloi of this period were organized enough to maintain a multi-provincial business model, and had enough free agents to do so. Although there is some suggestion that Psylloi were kept as slaves,[53] there would have to be a significant portion of them both free and mobile enough not only to travel to Italy, but to maintain contacts with their Libyan relatives. Without more context, it is difficult to say how Pliny knows about this activity. It could have been a xenophobic rumor current during his

day, or it could have been an actual marketing ploy executed by the Psylloi. In either case, the fact that the rumor was believable points to the Psylloi as a coherent and free-moving presence in the Mediterranean during the first century CE.

The second of Pliny's anecdotes provides additional information about the way in which the Psylloi operated: "There are also poison frogs, especially the *rubeta*, and we have seen (*vidimus*) the Psylloi taking [the frogs] from heated plates and applying them as a competition, resulting in a swifter poison even than that of an asp" (Plin. *HN* 25.123).

In this instance of promotional theater, the Psylloi demonstrate their aptitude for memorable theatricality as well as their active participation in their own legend. Pliny's unusual phrasing (*vidimus*) suggests that this is his own personal observation rather than secondhand information from one of his many source authors. Habitual and repeated exposure to venom does indeed provide a measure of immunity, and public competition was a primary mode of self-promotion in antiquity. Indeed, it smacks of the public anatomical demonstrations given by Galen or the rhetorical competitions between sophists. The *rubeta* (an unknown poisonous species of frog/toad) is also mentioned by Juvenal as a poison of choice for husband-murdering women in Rome, thus suggesting that this is a species of frog native to Italy, or at least to Europe.[54] In that case, we might place Pliny's Psylloi and their poison frog contests not as a local Libyan attraction, but as taking place in Europe and possibly within the city of Rome. Here we see the Psylloi engaging in the same kind of competitive marketing that other professional classes of the time would use, thus actively embracing the expectations that educated Romans had of them and profiting from their stereotyped representation in Greek and Roman literature.[55]

Conclusions

It is difficult to say with any certainty whether the Psylloi's one-dimensional portrayal as snake specialists originated from a pre-existing tribal identity or from fetishized projections of Greek explorers in search of the miraculous and exotic. However, it seems that the Psylloi were aware of their reputation and the possibilities it offered them for agency and participation in the larger world of the Mediterranean. Through a combination of drama, skill, and remarkable group cohesion, they made themselves desirable to the educated elite and indispensable for the traveler in venom-infested territories. In them, we may see a model for how those who had no share in either Greek or Roman identity found a place for themselves in the multicultural environment of the Roman Empire.[56]

Notes

1 The topic of difference and power in the Roman Empire has been addressed by many authors in many contexts. Certainly Bowersock's *Greek Sophists in the Roman Empire* deserves special mention (Bowersock 1969), as does Balsdon's *Romans and Aliens* (Balsdon 1979). More recently, the question of 'Greekness' and its use as a label of identity has been addressed by Tim Whitmarsh in *Greek Literature and the Roman Empire: The Politics of Imitation* (Whitmarsh 2001) and Simon Swain in *Hellenism and Empire* (Swain 2003). Whitmarsh's edited volume *Local Knowledge and Microidentities in the Imperial Greek World* then expands the question of how difference functioned within the Imperial Roman system (Whitmarsh 2010). For works that go beyond the special issues of Hellenism, Snowden, Gruen, and Isaac address the question of difference and the construction of race (Snowden 1970, 1983, Gruen 2011, 2013, Isaac 2004).

The question of "Friendly Kings" is also bound up in the relationship of non-Roman government to Roman control (Braund 1984, Kropp 2013). No such king seems to exist for the Psylloi, but there is implied clientship perhaps in their service to Cato (Plut. *Cat*. 56; Luc. 909–11). The Psylloi have only been discussed at any given length in Colin's monograph on Greco-Roman Libyans, and there he gives due consideration to the degree to which the ancient sources can be used to give modern

Table 11.1 Appendix: Surviving testimony of the Psylloi

Author	*Citation*	*Summary of content*
Hecataeus of Miletus	Jacoby *FGrHist* #1 F332	Identifies a "Psyllikos" bay (see n. 8)
Herodotus	*Historiai* 4.173	Extinction of the Psylloi in a sandstorm
Democritus of Abdera	In Aelius Promotus *Peri tōn iobolōn thēriōn kai dēlētēriōn pharmakōn* 27	Psylloi are immune to poisonous bites
Callias	In Ael. *NA* 16.28	Psylloi cure wounds by spitting on them and/or pressing their naked bodies to that of poison victims
Antigonus of Carystus	*Historiae Mirabilies* 2.64	Psylloi are immune to poisonous bites
Nicander	In Ael. *NA* 16.28	Psylloi are immune to poisonous bites
Agatharchides	In Plin. *HN* 7.14	Psylloi are immune to poisonous bites
Agatharchides	In Ael. *NA* 16.27	Psylloi are not only immune to poisonous bites, but can repel snakes with their smell. Psylloi infants being exposed to snakebite
Agroetas	In Aelius Herodianus *Peri monērous lexeōs* Proem 11.19	Passing mention of the "*ethnos*" Psylloi
Varro	Book 1. fr. 2.2 Prisc. *GL* 2.524K	Repeats the story about infant Psylloi being exposed to snakebites
Cinna	Fr. 10 In Gellius *Noctes Atticae* 9.12.12	Mentions Psylloi charming snakes
Strabo	*Geōgraphica* 13.1.14	Psylloi mentioned as a possible ancestor to the Ophiogenes
Strabo	*Geōgraphica* 2.5.33, 17.1.44, 17.2.23.	Locates the Psylloi as a living Libyan tribe living in proximity to the Nasamones
Celsus	*Med.* 5.27.3	Discusses the technique used by the Psylloi to suck venom from a bite
Lucan	*Pharsalia* 9.891–939	Psylloi aiding Cato in venom curing by licking and sucking
Pliny	*HN* 5.27	Location of the Psylloi
Pliny	*HN* 8.93	Psylloi are immune to poisonous bites

(continued)

Table 11.1 (continued)

Author	*Citation*	*Summary of content*
Pliny	*HN* 11.88–9	Psylloi exporting scorpions, scorpions as native to Africa
Pliny	*HN* 11.279	"*diximus hominum genera qui venena serpentium suctu corporibus eximerent*"—oblique reference to the Psylloi
Pliny	*HN* 21.78	Psylloi's immunity to poison
Pliny	*HN* 25.123	Psylloi and frog-heating contests
Pliny	*HN* 28.30	Psylloi (and Marsi) as poison-resistant people
Suetonius	*Aug.* 17.4	Psylloi tried to revive Cleopatra
Plutarch	*Vit. Cat. Min.* 56	Cato using Psylloi on campaign
Ptolemy	*Geōgraphica* 4.4.6	Locates the Psylloi in the wilds near the Lassanikoi
Pausanias	*Periegesis* 9.28.1	Mentions the Libyan race of Psylloi as a reliable cure for snakebite
Aulus Gellius	*NA* 16.11	Chapter description identifies the Psylloi of Herodotus with the Psylloi contemporary to Gellius—they are compared to the Marsi
Galen	*De Antidotis* 15 (Kühn 14, 193)	Mentions Psylloi in passing
Sextus Empiricus	*Pyr.* 1.82	Mentions the "Psyllaeis" who are not harmed by snakebite
Cassius Dio	*Rōmaikē Historia* 51.14	Psylloi attempt to revive Cleopatra VII
Aelian	*NA* 1.57	Psylloi are immune to snakebite and test their wives for adultery by exposing their infants to snakes
Aelian	*NA* 16.37	Differentiates between Libyan and Indian "Psylloi"—the Indian variety do not share the Libyan anti-venom abilities
Modestinus	*Dig.* 40.5.14, pr. 3	A slave named "Psyllus" mentioned in a manumission case
Anonymous	Fr. 2, Anth. Lyr. 2.239	Mentions the Psylloi's poison-curing abilities and residency in the "Syrtis"—possibly related to Nicander

historians/anthropologists a sense of who and what the Psylloi were (Colin 2000), and Smith's *What Happened to the Ancient Libyans* includes the Psylloi in a much larger general discussion (Smith 2003). This chapter is concerned primarily with the relationship of the Psylloi to the ruling elites of their day, especially Roman employers buying within the Roman medical marketplace.

2 *Genos* is used by the Greek sources to describe the Psylloi, and I have used it in my own text. For more on the terminology of identity in Greek literature of the Archaic and classical periods, see Kennedy, this volume, p. 10–1.

3 Snake control is a fairly common feature of magical lore (Ogden 2002, Tupet 1986), but there is extensive overlap in antiquity between 'science' (*philosophia*) and 'magic.' The majority of sources treat the Psylloi and their abilities as a natural (rather than supernatural) phenomenon, sometimes explicitly. For instance, Pliny, when discussing the Marsi, says that the Marsi possess the "same natural force" as the Psylloi (*vim* ***naturalem*** *eam HN* 7.15, emphasis added). Lucan, writing dramatic epic, is the only source to classify the Psylloi as explicitly 'magical' (Pharsalia 9.923).

4 The Ophiogenes were from Parium in Asia Minor, and the Marsi from the mountains due east of Rome. Both had reputations as being immune to snakes and capable of treating their bites, but neither seems to have reached the level of fame that the Psylloi did (Plin. *HN* 7.13–15). Indeed, Strabo goes so far as to suggest that the Ophiogenes are descended from the Psylloi: Strabo *Geog*. 13.1.14. See also Irby, this volume, p. 257, 263 n.68.

5 Although "Libya" is often used, particularly in older geographers, to refer to the bulk of non-Egyptian North Africa, particular references to the Psylloi place them among the nomadic peoples of inland Cyrenaica. Hdt. 4.173 places them between the Nasamones, south and west of Cyrene, and the more inland and southern Garamantes. Strabo 17.23 puts the Psylloi more solidly in the dry regions south of the Syrtis and Cyrenaica. Cf. Roller 2003, 183–90.

6 Lucan waxes eloquent on the theme in *Pharsalia* 9, with the most pithy summary falling at 402–3: *serpens, sitis, ardor harenae/ dulcia uirtuti; gaudet patientia duris.* "Serpent, thirst, the heat of the sand/ are sweet things for valor; patience rejoices in hardships."

7 For modern venomous species of the region, see Bücherl, Buckley and Deulofeu 2013.

8 See Kennedy and Irby, this volume, though the relationship in Herodotus between environment and people is complex. See also Thomas 1999, 104–11.

9 Hecataeus of Miletos, who predates Herodotus and Democritus, is reported to have said: *Psyllikos kolpos megas kai bathus* ("The Psyllian bay is large and deep," *FGrHist* 1, F332.), but the fragment is late, and it is unclear whether the word is anything more than a toponym. It is Stephanos, the sixth-century CE Byzantine source for this fragment, who connects Hecataeus' name for the gulf to the Psylloi. The fragment is unattested elsewhere, and far too tenuously connected to the Psylloi to be considered the first mention of the Psylloi in Greek literature. I have, therefore, given that honor to Democritus and Herodotus. Pownall, in his commentary, identifies this bay as the Syrtis (*Byz. und Neugr. Jahrb.* 1F 332).

10 The "Syrtis" here most likely refers to the sandy shorelands of the Greater Syrtis (modern Gulf of Sidra) rather than the gulf itself (also called the Syrtis, Strabo *Geog*. 2.5.20).

11 All translations are my own, and my Pliny numbering follows Mayhoff's Teubner edition. Pliny the Elder will be referred to as simply Pliny, since Pliny the Younger is not a source for this chapter.

12 McCall addresses the question of the Nasamones in Herodotus at greater length (McCall 1999). For the general reputation of Libya in Greek sources for being unusually snake-infested, see Leigh's *Lucan and the Libyan Tale* (Leigh 2000).

13 Known primarily for developing Atomism into a philosophical system, he is also reported to have traveled widely in the Eastern Mediterranean, including to Egypt. It is possible that his journeys also included the Cyrenaica (Englert 2012).

14 The passage appears quoted in several ancient sources, with Promotus (c. 140–190 CE) being earliest, and seems to have come from a longer catalogue of facts about the horned viper and how to defend against it. The passage goes on to discuss how the tame weasel (or rooster—the text is uncertain) is another natural enemy of the viper, so much so that at the very sight or sound of the weasel, the viper dies on the spot. For further discussion of the thorny textual issues in this fragment, see Rohde 1873, and for information on Promotus, see Keyser and Irby-Massie 2012.

15 "*On Venomous Beasts and Poisonous Drugs*." For text and commentary, see Aelius Promotus and Ihm 1995.

16 Indeed, a sense of this connection in the context of venomous animals is present in Aristotle's *Historia Animalium* 8.29.

17 It is important to add, at this juncture, that autochthony is never specifically claimed for the Psylloi by any of the authors who mention them. All the right elements are there, from the strong geographical link to the association with snakes, but if anyone did make the connection, it is lost to history. The closest the sources come to it is in Strabo *Geog.* 13.1.14 "[The Ophiogenes] say that the founder of the tribe (*tou genous*) was a certain hero (*hēroa tina*) who changed from a snake: perhaps he was one of the Psylloi of Libya, and the power (*hē dunamis*) passed to the tribe for a time." It is a weak case at best. A snake-ancestor gives birth to the *Ophiogenes*, not the Psylloi. Moreover, the Psylloi are being used by Strabo as a euhemerism to explain away a possibly (but not explicitly) autochthonous snake ancestor; Strabo is not commenting on the origin of the Psylloi's abilities at all. It is more accurate to say that the precise methods by which Libya produced the Psylloi are left undefined and largely unexamined. So strong was the tendency to link climate with human variation that there was no need to spell it out in every case.

18 For instance, Nic. *Theriaka* 235–51 describes the appearance of a viper wound as scorched (*purikmētoio* 241) in appearance, engendering a sense of thirst (*dipsēi . . . auēi* 251).

19 One must keep in mind that Democritus only maintains that the Psylloi can cure snakebites. He does not yet, as later authors do, claim that Psylloi are immune to snakebites. One could interpret the passage to mean that they have special knowledge. However, if it were local knowledge at issue, that knowledge could be passed along to non-Psylloi. The fact that Democritus feels an actual Psyllos is needed points to something more than a *genos* proprietary snake-lore, and subsequent reports of the Psylloi's abilities bear that out.

20 Probably meant to be "*galia*"; see Rohde 1873.

21 Callias of Syracuse was a biographer of the tyrant Agathocles (also of Syracuse, 316–289 BCE) whose work seems to have included passages about the peoples of the Cyrenaica (Callias [5] in the *OCD*). Agatharchides of Cnidus was a historian active in Alexandria whose work *On the Erythraean Sea* was a major work of ethnography and source for many later geographers (Englert 2012).

22 Callias discusses a stepped treatment beginning with spittle washes and ending with skin-to-skin contact. This treatment will be discussed in greater detail later in the chapter. Ael. *NA* 16.28.

23 Some representative examples include Cat. *Agr.* 160 in which a reed and the recitation of a specific phrase is used to treat a dislocated joint. The recipes of Lais and Salpe preserved in Pliny suggest the use of a silver bracelet containing black wool and menstrual fluid to cure rabies or periodic fevers (Plin. *HN* 28.82). For the use of spit as a warding and cure (especially for snakebite and epilepsy), Plin. *HN* 28.35. Dioscorides 2.11 (Beck 2005, 97) suggests using a ground scorpion applied topically to cure scorpion stings, and at 2.47 (Beck 2005, 104) the patient is urged to wear the canine of the dog that bit them on their arm as a prophylactic against rabies.

24 Ael. *NA* 16.27–8 and Plin. *HN* 7.14.

25 Here follow the full texts of first Pliny, then Aelian: "And there is a similar tribe in Africa called the Psylloi, as Agatharchides writes, quoting the Psyllian king (*Psyllo rege dicta*), whose grave is in the region (*in parte*) of the Greater Syrtes. There has been a venom born into their bodies (*corpori ingenitum fuit virus*) that is deadly (*exitale*) to serpents and by whose odor they lull them to sleep; indeed there is a custom of exposing their children as soon as they are born (*genitos protinus obiciendi*) to the most savage of them, and with that method of testing [they proved] the chastity of their wives, since serpents would not flee children of adulterous blood. This very tribe indeed was almost killed off in inter-tribal warfare (*internicione*) by the Nasamones, who now hold those lands. And yet the tribe of men descending from those, who fled or were away when the fighting occurred, today remain there in small numbers" (Plin. *HN* 7.14).

"Agatharchides says that there is a tribe (*genos*) in Libya of certain men, and also that they are called the Psylloi, and they are such as differ in respect to the other lives of the rest of men not at all except in one thing, that they have a different and incredible body (*xenon te kai paradoxon*) when compared with other races: for all the stinging and biting animals in existence are unable to harm only them (*mēden autous monous adikein*). Indeed they are affected neither by the bite of snakes nor by their stabbing tooth that is deadly to others nor by the strike of a stinging scorpion. And then when one of these creatures both approaches them and touches their body, and at the same time also sniffs the smell of that people (*tēs osmēs tēs ekeinōn spasē*), as if having drunk a potion for sleep it is made senseless and tractable, and it remains sluggish until the man (*ho anthropos*) leaves. And it is how they prove whether their offspring is legitimate or illegitimate, by testing them with crawling things (*herpetois*), just as I said earlier that artisans test gold in fire" (Ael. *NA* 16.27–8).

26 Beagon addresses the overarching themes of Pliny's anthropology in the introduction to her commentary on the seventh book of the *Naturalis Historia* (Beagon 2005, 1–57). Steven Smith's recent book

addresses Aelian's historical and intellectual context, as well as his use of animal lore to discuss human behavior and contemporary conditions in politics and philosophy (Smith 2014) . See also Secord, this volume, for the possibilities animal lore presented for discussing human nature and culture.

27 Pliny's final statement, that the Psylloi were nearly wiped out by the Nasamones, is not in Aelian at all, which suggests that either Pliny includes more of Agatharchides than does Aelian, or that this observation is Pliny's own attempt to explain the discrepancy between Herodotus and later authors on the Psylloi.

28 See Kennedy, this volume, for a discussion of this sort of inheritance among the Makrokephaloi.

29 See Irby, this volume, for discussion of the evidence for the participation of the Psylloi and other such groups in the medical service of the Roman legions.

30 Plut. *Vit. Cat. Min.* 56; Luc. 909–11.

31 Suet. *Aug.* 17.4.

32 Gell. *NA* 9.12.12.

33 Priscianus *GLK* 2.542.2.

34 Strabo mentions Psylloi in passing at 2.5.33, 17.1.44, and 17.2.23.

35 See pages 203–4 for a complete listing of testimonia. Of particular relevance are Ael. *NA* 16.37, Sext. Emp. *Pyr.* 1.82, Gal. *On Antidotes* 15 (Kühn 14), Gell. *NA* 16.11, and Ptol. *Geog.* 4.4.6.

36 It was a common belief in antiquity that snakes concocted venom from eating poisonous plants, e.g. *qualis . . . coluber mala gramina pastus*. ("Just like a cobra, fed upon evil grasses," *Aen.* 2.471).

37 Celsus 5.27.3 is discussed immediately below, and Plin. *HN* 25.123 further along in this chapter. Note, however, Pliny's wording in that passage suggestive of first-hand experience: "We have seen (*vidimus*) the Psylli . . . ." Syme reads this line similarly (Syme 1969).

38 See Irby, this volume, p. 252–60.

39 See *HN* 29.1–28.

40 He may be seen as part of a Roman move away from environmental determinism in general: see Irby, this volume.

41 There is no way of saying whether the rituals depicted in Lucan are the product of Lucan's invention, the Psylloi's methodology, or some mixture of the two. Absent any other such accounts, I have chosen to make the best of what Lucan gives us.

42 John Scarborough explores the relatively common practice in the ancient Mediterranean of using aromatic smoke to deter snakes. He also points out that any thick smoke will suffice to ward off snakes, making the choice of ingredients effective only on a psychological level (Scarborough 2010, V.5–6).

43 Centauria was a popular cure-all used in the Roman Army, as Irby discusses in this volume (p. 262, n. 61).

44 Presumably the toponym is a reference to Eryx in Sicily.

45 Exoticism was a common feature of ancient pharmacy as practiced among the elites, and one with implications of imperialism and exclusivity to the upper classes. See Nutton 1985, Totelin 2009, 11–140 and also her chapter in this volume.

46 The practice of pairing words with treatment was a regular feature of all but the most rationalized ancient medicine (see, for example, Cato, *Agr.* 160 and Pliny's discussion of the power of words at *HN* 28.10–3). One should apply the term 'magic' to it with caution, given that this may be an anachronistic interpretation.

47 The Marsi lived in the Apennines due east of Rome.

48 *Nasidium Marsi cultorem torridus agri/Percussit Prester*. 9.790–91. See also Plin. *HN* 28.30 and Gellius *NA* 16.11.

49 Current World Health Organization (WHO) statistics for snakebite are listed online via the Neglected Tropical Diseases Initiative: http://www.who.int/neglected_diseases/diseases/snakebites/en/. The International Society on Toxicology keeps public snakebite tables on its Global Snakebite Initiative page: http://www.toxinology.org/GSI-epidemiology2.htm.

50 Scarborough's discussion of Nicander's toxicology includes a more detailed description of the possible range of symptoms and outcomes for the most infamous snakes and insects in the region (Scarborough 2010, V.6–9, VI.4–13, 15–17).

51 Many of the drugs recommended as part of theriac recipes were quite strong and could kill even a healthy person when used inexpertly, or on a person whose respiration and/or heartbeat was already compromised by envenomation. Scarborough discusses some common ingredients, and has recently written on Thornapple (*datura stramonium L.*, or a closely related species) and Opium (*papaver somniferum*) particularly, both of which are narcotics that repress respiration. The victim's pain would be controlled as he or she slowly stopped breathing—not a particularly good treatment outcome (Scarborough 2010, V, VII, 2012).

52 An odd statement, given that the Pharos was on a very small island. Perhaps it refers to the district in Alexandria nearest the Pharos, but that is still a strange place to find flying scorpions.
53 The *Digest* 40.5.14, pr. 3, mentions "Psyllus" as a slave's name.
54 Juv. 1.70, 6.659. For further discussion of toads and the *rubeta*, Kitchell 2014, 185–6.
55 Such competitions among physicians are the subject of papers by both Maud Gleason and Heinrich Von Staden; within the competitive environment of Greek-educated intellectual life under the Roman Empire (the 'Second Sophistic'), a physician like Galen would use animal vivisection as a kind of street theater aimed at furthering his medical practice (Von Staden 1995, Gleason 2009).
56 I am indebted to many colleagues for their help in putting together this wide-ranging interdisciplinary project. Special thanks are due first and foremost to Duane W. Roller, who first suggested the topic to me several years ago, and who has been of immense help in bringing the draft to its current state. Thanks also to David Rosenbloom, without whom I never would have gotten to the bottom of what a "*katoikidios gallia*" was, or why Democritus was so interested in it. I am lucky enough to have two biologists in my life—Katy Pawlik McCoard and Jessica Healy—who patiently answered my questions about snakes, scorpions, and the basics of zoology. Drs. Jo and Mark Jones (M.D.) are responsible not only for the author's existence, but also for answering her endless questions about how envenomed wounds are treated and whether or not a given treatment would work. My student Abigail Worgul, who proofread the final drafts with a sharp and helpful eye, has also done wonders for the present chapter. Last but not least, thanks are due to my co-editor Rebecca Kennedy, whose comments were invaluable to the theoretical side of this chapter, and the many contributors to the present volume, whose fascinating work helped me to position and clarify my own thoughts on the Psylloi. To the many more friends and colleagues who gave feedback and support to this project, my deepest gratitude.

Bibliography

Aelius Promotus and Sibylle Ihm. 1995. *Der Traktat Peri tōn Iobolōn kai Dēlētētiōn Farmakōn des sog. Aelius Promotus*. Wiesbaden: Reichert.
Balsdon, J.P.V.D. 1979. *Romans and Aliens*. Chapel Hill: University of North Carolina Press.
Beagon, Mary. 2005. *The Elder Pliny on the Human Animal: Natural History, book 7*. Oxford: Clarendon Press.
Beck, Lily Y., trans. 2005. *Pedanius Dioscorides of Anazarbus: De Materia Medica*. Hildesheim and New York: Olms-Weidmann.
Bowersock, Glenn.W. 1969. *Greek Sophists in the Roman Empire*. Oxford: Clarendon Press.
Braund, David. 1984. *Rome and the Friendly King: The Character of the Client Kingship*. London and New York: Croom Helm and St. Martin's Press.
Bücherl, Wolfgang, Eleanor E. Buckley, and Venancio Deulofeu. 2013. *Venomous Animals and Their Venoms: Venomous Vertebrates*. Burlington, VT: Elsevier Science.
Colin, Frédéric. 2000. *Les Peuples Libyens de la Cyrénaïque à l'Egypte d'après les Sources de l'Antiquité Classique*. Bruxelles: Palais des Académies.
Englert, Walter. 2012. "Demokritos of Abdera (440–380 BCE)." In *The Encyclopedia of Ancient Natural Scientists: The Greek Tradition and its Many Heirs*, edited by Paul T. Keyser and Georgia L. Irby-Massie, 235–6. London and New York: Routledge.
Flemming, Rebecca. 2007. "Empires of Knowledge: Medicine and Health in the Hellenistic World." In *A Companion to the Hellenistic World*, edited by A. Erskine, 447–63. Oxford: Blackwell.
Gleason, Maud W. 2009. "Shock and Awe: The Performance Dimension of Galen's Anatomy Demonstrations." In *Galen and the World of Knowledge*, edited by Christopher Gill, Tim Whitmarsh and John Wilkins, 85–114. Cambridge: Cambridge University Press.
Gruen, Erich S. 2011. *Rethinking the Other in Antiquity*, 159–78. Princeton, NJ: Princeton University Press.
——. 2013. "Did Ancient Identity Depend on Ethnicity? A Preliminary Probe." *Phoenix* 67(1/2): 1–22.
Hornblower, Simon, Antony Spawforth and Esther Eidinow. 2012. *The Oxford Classical Dictionary*. Oxford: Oxford University Press.
Isaac, Benjamin H. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.
Keyser, Paul T. and Georgia L. Irby-Massie. 2012. "Aelius Promotus of Alexandria (c. 140–190 CE?)." In *The Encyclopedia of Ancient Natural Scientists: The Greek Tradition and its Many Heirs*, edited by Paul T. Keyser and Georgia L. Irby-Massie, 35. London and New York: Routledge.
Kitchell, Kenneth F. 2014. *Animals in the Ancient World from A to Z*. New York: Routledge.

Kropp, A.J.M. 2013. "Client Kings." In *The Encyclopedia of Ancient History*. London: Wiley-Blackwell.
Leigh, Matthew. 2000. "Lucan and the Libyan Tale." *The Journal of Roman Studies* 90: 95–109.
McCall, Daniel F. 1999. "Herodotus on the Garamantes: A Problem in Protohistory." *History in Africa* 26: 197–217.
Nutton, Vivian. 1985. "The Drug Trade in Antiquity." *Journal of the Royal Society of Medicine* 78(2): 138–45.
Ogden, Daniel. 2002. *Magic, Witchcraft, and Ghosts in the Greek and Roman Worlds: A Sourcebook*. New York: Oxford University Press.
Rohde, Erwin. 1873. "Zu Aelius Promotus und den Ihm Zugeschriebenen Abhandlungen über Gifte." *Rheinisches Museum für Philologie* 28: 264–90.
Roller, Duane W. 2003. *The World of Juba II and Kleopatra Selene: Royal Scholarship on Rome's African Frontier*. New York: Routledge.
Scarborough, John. 2010. *Pharmacy and Drug Lore in Antiquity: Greece, Rome, Byzantium*. Farnham, UK and Burlington, VT: Ashgate Publishing.
——. 2012. "Thornapple in Graeco-Roman Pharmacology." *Classical Philology* 107(3): 247–55.
Smith, Richard L. 2003. "What Happened to the Ancient Libyans? Chasing Sources across the Sahara from Herodotus to Ibn Khaldun." *Journal of World History* 14(4): 459–500.
Smith, Steven D. 2014. *Man and Animal in Severan Rome: The Literary Imagination of Claudius Aelianus*. Cambridge: Cambridge University Press.
Snowden, Frank M. 1970. *Blacks in Antiquity: Ethiopians in the Greco-Roman Experience*. Cambridge, MA: Belknap Press of Harvard University Press.
——. 1983. *Before Color Prejudice: The Ancient View of Blacks*. Cambridge, MA: Harvard University Press.
Swain, Simon. 2003. *Hellenism and Empire: Language, Classicism, and Power in the Greek World, AD 50–250*. Oxford, UK: Clarendon Press.
Syme, Ronald. 1969. "Pliny the Procurator." *Harvard Studies in Classical Philology* 73: 201–36.
Totelin, Laurence M.V. 2009. *Hippocratic Recipes: Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece*. Leiden and Boston, MA: Brill.
Tupet, Anne Marie. 1986. "Rites Magiques dans l'Antiquité Romaine." *ANRW* 2(16.3): 2591–675.
Von Staden, Heinrich. 1995. "Anatomy as Rhetoric: Galen on Dissection and Persuasion." *Journal of the History of Medicine and Allied Sciences* 50(1): 47–66.
Whitmarsh, Tim. 2001. *Greek Literature and the Roman Empire: The Politics of Imitation*. Oxford and New York: Oxford University Press.
——. 2010. *Local Knowledge and Microidentities in the Imperial Greek World*. Cambridge: Cambridge University Press.

12

OVERCOMING ENVIRONMENTAL DETERMINISM

Introduced species, hybrid plants and animals, and transformed lands in the Hellenistic and Roman worlds

Jared Secord

Introduction

The possible damage that can be caused by introduced species of animals and plants is a familiar and much-discussed concept in the twenty-first century, but this was not the case in the Hellenistic and Roman worlds.[1] There was nothing in antiquity similar to the furor surrounding the gypsy moth, which has attracted so much attention and withstood so many attempts to eradicate it, ever since it was accidentally introduced to the United States in 1869.[2] The closest ancient equivalent is a disaster of a considerably smaller scale. This was the introduction of hares to the small island of Carpathus, an event that gained proverbial status because of the great damage that they caused to the island's vegetation (Arist. *Rh*. 3.11 1413a 17–20; cf. *Suda* λ 30, ο 105, οι 121 Adler; Zen. 4.48).[3] The relative silence of ancient authors compared to their modern counterparts about disasters caused by introduced animals or plants is a reflection not simply of the comparatively limited possibilities in the ancient world for international travel and trade, or even of the difficulties involved in noticing the often subtle and long-term changes that can accompany introduced species. This silence is a reflection also of a substantially different attitude regarding animals and plants in the Hellenistic and Roman worlds. There was little concern about the possibility that an introduced species of animal or plant might have a harmful impact on its new land.[4] And, while there was some recognition of the possibility that entire species of animals or plants might become extinct,[5] there was nonetheless little concern about maintaining the original state of the lands to which foreign plants and animals were introduced. The successful introduction of an animal or a plant to a new region was regarded, overall, as something to be celebrated.

The Hellenistic and Roman willingness to introduce animals and plants to new regions is substantially at odds with suggestions about the importance of indigeneity and purity in the current body of studies on identity in antiquity, especially in classical Greece, which have largely excluded animals and plants from their focus.[6] Benjamin Isaac's *The Invention of Racism in Classical Antiquity*, for instance, says nothing about plants and very little about

animals, and what it does say is mostly in terms of the tendency of ancient authors to liken foreign peoples to them.[7] A distorted view of identity results from the anthropocentric focus of Isaac's book. As much as "unmixed origin, pure lineage, and autochthony" may have been factors that were often emphasized by Greek and Roman scholars with respect to people,[8] all three factors received very little attention in discussions relating to animals and plants. The relative absence of these three factors in botanical and zoological literature from antiquity becomes all the more significant when one realizes how much 'purity' and 'autochthony' have been emphasized in works of these same genres of literature written in other periods of history. Zoological literature from France in the later medieval period, for instance, displayed a major interest in ranking different breeds of dogs and hawks with respect to their 'nobility,' and in the process provided fodder for developing ideas about heredity and 'race,' a word whose early use in French often came in contexts relating to dogs and hunting.[9] As this example illustrates, concerns for maintaining the purity of various breeds of animals were connected also to the concerns that a group of people had to maintain the purity of their own blood-lines. Much the same can be said also about German botanical literature of the first half of the twentieth century, and the emphasis that it tended to place on using 'native' rather than 'foreign' or 'exotic' plants in gardens.[10] Ancient botanical and zoological literature, in contrast, placed much more emphasis on the benefits of relocating animals and plants to new lands, and of producing new hybrid varieties of both by interbreeding and grafting. To judge from the attitudes that appear in botanical and zoological literature, indigeneity and purity were substantially less important considerations for ancient scholars than has been suggested.

Ancient scholars were instead much more interested in the possibility of reshaping the lands in which they lived, and of exerting substantial control over the animals and plants that lived with them, all for the sake of human benefit. This emphasis on reshaping lands and controlling fauna and flora clashes again with what has been suggested in the current body of scholarship on identity in the ancient world. The clash is especially apparent in relation to what has been suggested about environmentally deterministic theories, which held that there were strong natural links between a land and its inhabitants. In Isaac's view, proponents of such theories were insistent both that the influence of environmental factors—including climate, water supply, and elevation—on a people's nature and character was inescapable, and that the relocation of people from one land to another could result only in changes "for the worse."[11] Such a claim cannot stand in light of the perspective that comes from the authors of ancient botanical and zoological literature, who believed that animals and plants could be successfully introduced to nearly any land and substantially improved by appropriate human control and management. These authors still acknowledged that environmental factors shaped the nature and character of a land's inhabitants, but they sought as much as possible to overcome unfavorable conditions and exploit favorable conditions in order to produce plants and animals of the desired type in nearly any region of the world. Their perspectives were still shaped by environmentally deterministic theories, but they allowed for the possibility of positive changes to result from the properly managed relocation of animals and plants from one region to another, and from judiciously controlled breeding and training/cultivation. As much as ancient scholars may have shied away from the idea of exerting control over nature, they did not feel bound by seemingly deterministic environmental factors and limitations in matters relating to plants and animals.[12] They believed instead that the world and its inhabitants could be reshaped and controlled for the benefit of humanity.

As this chapter will demonstrate, the desire to introduce species to new lands and to improve them for the sake of human benefit is a constant and recurring theme in botanical

and zoological literature of the Hellenistic and Roman worlds. Hellenistic and Roman authors both were eager to take advantage of the new opportunities for relocating animals and plants that came in the wake of the conquests of Alexander the Great, and the great expansion of the Roman Empire. The first part of this chapter illustrates how the mass relocation of animals and plants in the Hellenistic period encouraged scholars to consider how flora, fauna, and entire lands could be reshaped in ways that were beneficial for people. A case study is then offered concerning the policies of Ptolemaic kings, which demonstrate the great efforts that were expended to make introduced animals and plants flourish in new lands, and to produce improved varieties of them by careful management and experiments in interbreeding. The chapter's second part argues that a similar attitude existed also under the Roman Empire, where the potential for gain from the importation and interbreeding of foreign animals overcame objections that such animals might bring corruption to Rome. The successful relocation of animals and plants to new lands across the entire empire was a powerful demonstration to many observers that humanity could overcome environmental factors and produce animals and plants of desired characteristics under nearly any circumstances.

Environmental determinism and the relocation of animals and plants in the Hellenistic world

There was a widespread belief in antiquity that people, animals, and plants were shaped by the lands in which they lived. Animals and plants were accordingly included alongside people as evidence to support environmentally deterministic theories that posited the existence of strong natural links between a land and the character of its inhabitants. But the successful introduction of animals and plants to new lands in the Hellenistic period called into question how rigidly such theories could be applied, and encouraged scholars to acknowledge that human influence could overcome environmental factors. Such an acknowledgment even led Theophrastus, writing in the first decades after Alexander's conquests, to believe that people could simulate and reproduce ideal conditions that would make plants thrive outside of their indigenous regions.

The environmentally deterministic theories with which Hellenistic scholars engaged were a legacy passed down by their classical predecessors, whose deterministic perspectives were in large part a consequence of their having to concern themselves little with the relocation of animals, people, and plants. Authors of the classical period were certainly familiar with large-scale migrations of people, as is apparent, for instance, from Herodotus' treatment of the wanderings of the Pelasgians (1.57–8), but such migrations belonged to the distant and dimly remembered past, not to the present day.[13] Herodotus similarly had little to say about the relocation of animals, and he could take for granted that no one in his audience had ever encountered the fantastic peoples and animals that he had heard inhabited the edges of the earth (e.g. 3.115–16). Greeks knew what camels looked like, Herodotus granted (3.103), but surely none of them had encountered a griffin, flying snake, or gold-digging ant, though he claimed to have himself seen the bones of flying snakes in Egypt (2.75; 3.102, 107–9, 116; 4.13). The prospect of these remarkable creatures coming to Greece seemed quite remote to Herodotus, and he suggested, moreover, that there was a link between them and the places where they were born: "The extreme edges of the inhabited world were somehow allotted the most beautiful things" (3.106; cf. 3.116).[14] Presumably, such creatures could not exist elsewhere. A similarly deterministic perspective appears also in the Hippocratic *Airs, Waters, and Places*, a text roughly contemporary with Herodotus.[15] This work acknowledged the Greek colonization of Asia Minor, and emphasized that the land's new and old residents would inevitably be

shaped by the relative gentleness of its features and climate: "manliness, endurance, tolerance for work, and spirit could not occur in the nature . . . of either a native- or foreign-born person (*mēte homophulou mēte allophulou*)" (Hippoc. *Aer*. 12.6–7).[16] To judge from this lone example, the movement of people from place to place presented no real challenge to the author's deterministic perspective: a process of acclimatization would result from relocation, and the one example of this process that he treated involved a change "for the worse," which is in line with the arguments of Isaac.[17] But an exception to the author's determinism comes in his discussion of the wild plants of Asia Minor, which he suggested that men would "cultivate from their wild [state] (*hēmerountes ex agriōn*), and transplant (*metaphuteontes*) to suitable [land]" (Hippoc. *Aer*. 12.5).[18] Even in this instance, though, the text still subordinates human ingenuity to the natural characteristics and climate of a land: the wild plants are cultivated by people, but their seeds need to be planted in land that will allow them to thrive. Both Herodotus and the Hippocratic author acknowledged the possibility and the potential impact of relocation briefly, but neither made much allowance in their perspectives for the wholesale movement of people, animals, and plants from one region to another that characterized the Hellenistic period.

Even Aristotle, on the cusp of the Hellenistic period, engaged very little with the idea of mass relocations of people, animals, and plants in the formulation of his own environmentally deterministic perspective, which again made no allowance for positive changes to result from relocation. Aristotle's zoological works do display a significant interest in foreign animals, especially the elephant,[19] and they also refer almost incidentally to foreign birds that had been imported to Greece and were being bred there, such as the peafowl and guinea fowl (e.g. *Hist. an.* 6.9 564a 25–b9; 6.2 559a 25–6).[20] But the zoological works provide no confirmation to the claim made by several ancient sources that his researches were lavishly supported by his former pupil Alexander (Plin. *HN* 8.44; Ath. 9.398e; cf. Ael. *VH* 4.19), much less that the great Macedonian conqueror made efforts on his campaign to send back animal specimens, including an elephant, to his teacher, as has been suggested by some scholars.[21] The only potential sign that Aristotle had access to new information about foreign animals as a result of Alexander's expedition comes from a brief reference to the large quantities that elephants could eat and drink, which is expressed in Macedonian units of measure (*Hist. an.* 7[8].9 596a 3–9). However Aristotle may have gained access to this information, the overall perspective of his zoological works was that of the classical rather than the Hellenistic period, and he depended heavily on older written sources, such as Herodotus, for his information about foreign animals.[22] Aristotle nonetheless did address the relocation of animals on a smaller scale, and he was clearly interested in what might happen when an animal was introduced to a new land. But his scattered comments relating to the introduction of animals to new lands offer no systematic theory to explain successes or failures. Aristotle was clearly baffled, for instance, about why hares introduced to Ithaca were unable to survive on the island, and why all of them were found "dead by the sea, pointing in the direction from which they had been brought" (*Hist. an.* 7[8].28 606a 3–5). He similarly had no answer to explain why there were no moles in the region of Lebadia in Boeotia, and why members of the species brought there were "unwilling to dig," despite their thriving population in nearby Orchomenus (*Hist. an*. 7[8].28. 605b 32–606a 3). Such examples spoke only to the great disparities between regions frequently acknowledged by Aristotle, in spite of his belief that the general differences between animals on the three continents could be explained with a wide-ranging environmental theory: "Overall, wild animals are wilder in Asia, but all of them in Europe are more courageous, and those in Libya are most varied in form" (*Hist. an.* 7[8].28 606b 17–19). Similar determinism was present also in Aristotle's statement about the broad differences between the people of

Europe and Asia: the cold climate of the former gave its residents more spirit, but the warm climate of the latter gave its residents more skill and intelligence (*Pol*. 7.7 1327b 23–9). Local variation was still possible in Aristotle's broad vision, and he was accordingly able to explain that Greece possessed the best traits of both Europe and Asia because of its intermediate location between the two continents, though even in Greece there was still variety among different peoples (*Pol.* 7.7 1327b 29–36). But pessimistic determinism carried the day, as is apparent from Aristotle's brief treatment of the Achaeans, a barbarous people whose name led Greek scholars to believe that they were the descendants of the Achaeans who fought at Troy. These once-Greek Achaeans, Aristotle believed, "became savage (*apēgriōmenōn*)" and delighted "in raw meat or in human flesh," after they settled in the region north of the Black Sea (*Eth. Nic*. 7.5 1148b 21–4; *Pol*. 8.4 1338b 19–24).[23] Aristotle's treatment of the spurious case of the Achaeans is suggestive of his belief in a rigidly deterministic link between a land and its inhabitants that was capable even of transforming civilized Greeks into savage cannibals. And, once again, this example dealt only with the possibility of a change "for the worse." The formation of Aristotle's environmentally deterministic perspective had to grapple very little with the possibility of mass relocation of animals or people, even as such relocations were beginning to take place in the final years of his life.

Whereas Aristotle's works showed little awareness of the changes brought about by Alexander's expedition, the works of his pupil Theophrastus demonstrate that he was engaging closely with the realities of the new Hellenistic world, and especially with the great movement of plants that came with it. Theophrastus' extant botanical works were products of the early third century, and they display specific knowledge of many foreign varieties of plants encountered by members of Alexander's expedition.[24] His treatment of plants included extensive discussion of why introduced flora would thrive (or not) in the different conditions of their new lands, and how wild plants might be tamed and changed by human influence, in spite of environmental factors. On this subject, Theophrastus drew from his own hands-on experience with plants: he owned a garden at Athens (Diog. Laert. 5.39), and the efforts he expended in it may well be detected by his practical advice about the use of urine and manure as fertilizers (e.g. *Caus. Pl.* 3.9.3, 17.5).[25] His father's reputed profession as a fuller (e.g. Diog. Laert. 5.36), in turn, may have accustomed him more than most scholars to dirtying his hands.[26] Theophrastus was therefore in an excellent position both to chronicle the changes that were taking place in the world around him,[27] and to celebrate the successes that he and other gardeners had in making introduced plants flourish in new lands.

Unsurprisingly, therefore, the botanical works of Theophrastus offer a positive and optimistic perspective on the idea of relocating plants and cultivating them in new regions: such attempts might often fail to succeed because of environmental and other factors outside of human control, but any success that they did achieve was completely in line with nature. Failed attempts to cultivate wild plants or to introduce plants to new regions were common enough, Theophrastus emphasized, and these failures were the result of the plant or the land itself. Some plants, Theophrastus acknowledged, were simply "wild by nature (*agrion tēi phusei*)," and would never respond to cultivation (*Hist. pl.* 3.2.2; cf. 1.3.6).[28] Other plants introduced to new regions might be unable to thrive because of the "nature of the land (*tēi tēs chōras phusei*)," "the strength or weakness of their seeds," or the "mixture of the air (*tēi tou aeros krasei*)" (*Caus. pl.* 3.21.5).[29] A notable example of the last type of failure came, Theophrastus reported, when Harpalus, the treasurer of Alexander the Great, tried again and again in Babylon to grow ivy, a plant that was closely associated with Dionysus, and that held much interest for Alexander on his expedition (e.g. Arr. *Anab*. 5.2.5, *Indica* 5.9). As Theophrastus explained, "the land does

not receive [the ivy] because of the mixture of the air (*tēn tou aeros krasin*)" (*Hist. pl.* 4.4.1; cf. Plut. *Alex.* 35.15, *Quaest. conv.* 3.2 648c–d; Plin. *HN* 16.144). Notwithstanding the repeated failures of Harpalus with the ivy, Theophrastus often displayed confidence in the ability of people to introduce plants to new regions and make them grow there, even if they needed to expend considerable effort in the process (e.g. *Hist. pl.* 4.4.1, 4.5.7). Surprising and welcome changes might even happen, such as when pomegranate trees were brought to Egypt and to the river Pinarus in Cilicia: the fruit of the Egyptian trees became sweet and wine-like in their flavor, while the Cilician trees grew fruit without stones (*Hist. pl*. 2.2.7; *Caus. pl.* 1.9.2).[30] Changes of this sort were the result of bringing a plant to a region that suited it well (*Hist. pl.* 2.2.10), and Theophrastus' perspective on such cases was in essence the same as that voiced already by the Hippocratic author regarding the transplantation of wild plants in Asia Minor to suitable lands. But Theophrastus also suggested that human attention was capable on its own of taming wild plants to produce cultivated forms. "Husbandry (*geōrgia*)," Theophrastus suggested, "simply causes a change, taming (*exēmerousa*) trees and fruit" (*Caus. pl*. 2.14.2). A "lack of husbandry (*ageōrgesia*)," contrarily, can lead to changes for the worse, "for then all things, so to speak, become wild (*apagrioutai*)" (*Caus. pl.* 2.15.1; cf. *Hist. pl*. 2.2.9). Significantly, Theophrastus used the same verb—*apagioomai*—to describe a cultivated plant's transition into wildness that Aristotle had used to describe the transformation of the Achaeans from Greeks into barbarians. But Theophrastus' perspective, unlike those of the Hippocratic author and Aristotle, gave more credit to the ability of humans to take control over environmental factors, and not simply to be at their mercy. Theophrastus even argued that the efforts of people to cultivate and improve plants qualified as natural: "cultivation (*therapeia*)" aimed for the best results in plants, just as nature did. As Theophrastus explained, "the fulfillment of [a plant's] nature also comes about when whatever it happens to lack is added through art (*dia technēs*), such as appropriate and abundant nourishment, and the removal of things that would hinder and harm it." The human cultivation of plants, Theophrastus believed, was simply providing to them everything that "suitable places (*oikeioi topoi*)" would naturally provide (*Caus. pl.* 1.16.11).[31] Theophrastus did hedge his claim about the impact of cultivation, and note that some plants, particularly of medicinal varieties, always did better without human involvement, while others were better off with the aid of "cultivation and husbandry (*tēs therapeias kai geōrgias*)" (*Caus. pl.* 1.16.13). Without question, Theophrastus did emphasize that even dedicated human care would often be frustrated by the nature of a plant or a land. But he also recognized that human ingenuity could artificially reproduce ideal conditions for some plants to thrive, and that such successful reproductions, for all their artificiality, were still natural. For all his caution, Theophrastus still allowed himself to acknowledge and even to celebrate the great potential of human ingenuity to transform plants by cultivation, and to make them thrive in new lands.

Introducing animals and plants to Ptolemaic Egypt

Theophrastus' celebration of the possibilities that could come from the relocation of animals or plants was very much in the same spirit as the policies of the Ptolemaic kings of Egypt, who had purchased his works for the new library they established in Alexandria (Ath. 1.3b; cf. Diog. Laert. 5.37). The Ptolemies reveled in foreign animals and plants, and they made great efforts to import and establish breeding populations of them in Egypt. Their efforts were decidedly imperialistic in character, and they seemed to delight especially in the possibilities of taming animals that had a particular reputation for savagery. But, amidst their desire to tame animals and reshape their kingdom, the Ptolemies displayed little concern about maintaining the purity of imported or native species. The categories of 'native' and 'foreign' broke down

under Ptolemaic rule, even as their efforts to tame savage creatures were calling into question the distinction between 'human' and 'animal.' Their great successes in making foreign animals act as if they were civilized people even raised the possibility that the dichotomy between Greeks and barbarians might be broken down.

The Ptolemaic effort to import animals and plants to Egypt and to make them thrive was the embodiment of an optimistic belief that a land could undergo a major transformation with proper human care and management. Like Theophrastus, the Ptolemies and their subjects must have recognized that human effort could only go so far in overcoming the prevailing environmental conditions in Egypt. Pleasant and welcome surprises could result, such as the discovery mentioned already that pomegranate trees imported to Egypt produced sweet fruit that tasted like wine. But there were also frustrating reminders that some imported varieties of plants would revert to their Egyptian type with sufficient time. Egyptian cabbage, for instance, was characterized by its bitter taste, so seeds were imported from Rhodes, which was known for its sweet cabbage. Diphilus of Siphnos, a physician of the early third century, reported as much, along with the disappointing results of the experiment: cabbage seed "brought from Rhodes to Alexandria produces sweet cabbage for a year, but after that time acquires the local character" (Ath. 9.369f).[32] Efforts to establish olive crops also seem to have met with limited success.[33] But such failures should not distract us from the great labors exerted by the Ptolemies to transform Egypt by undertaking major projects of drainage, irrigation, and reclamation, especially in the Fayyum.[34] A telling sign of Ptolemaic success is the renaming of the Fayyum early in the third century: its old name of 'Marsh' was no longer appropriate.[35] New crops were introduced along with new settlers to the Fayyum, and these included Lycian garlic, Byzantine chickpeas, and Chian and Syrian figs.[36] Not all of these crops gained much acceptance from the native Egyptian population, but the Ptolemies were successful in encouraging farmers to grow a new variety of durum wheat which eventually replaced the variety of emmer wheat that had previously been grown (Hdt. 2.77.3-5).[37] Many foreign varieties of animals were imported also, with the goal of improving the breeding stock of the varieties that were native to Egypt.[38] Sheep from all over the world were brought to Egypt (e.g. Ath. 5.201b–c), and great effort was devoted to their care. Imported Milesian sheep, for instance, were clad in leather coats to protect their fleeces, and their wool was plucked by hand (*P. Cairo Zeno* 3.59430; cf. Varro, *Rust*. 2.11.7, Plin. *HN* 8.190). There was clearly no shortage of effort and optimism supporting the Ptolemaic effort to transform Egypt, even if not all of their experiments and policies succeeded.

A similarly optimistic spirit underlay the Ptolemaic effort to import and tame wild animals, which produced many notable successes. Even Agatharchides of Cnidus, a highly critical observer of the second century, had to acknowledge how impressive the Ptolemaic effort was.[39] Agatharchides was bothered that the collecting expeditions of Ptolemy II Philadelphus (r. 283–246) were taking "creatures that had been separated by nature (*tēi phusei*)" and gathering them together "deliberately into a single home" (Phot. *Bibl*. 250.1 441b = Agatharchides, *De mari Erythraeo*, 1.1).[40] But he nonetheless provided ample testimony to the great ingenuity and energy devoted to building the Ptolemaic collection. He referred, for instance, to the ships used to transport elephants up the Red Sea from southern Ptolemaic settlements to Berenice (Phot. *Bibl*. 250.83 456b–457a = 5.85a; Diod. Sic. 3.40.4 = 5.85b), where they would then be led across the desert and finally ferried down the Nile to Memphis.[41] He recorded also how the interests of Ptolemy II in foreign animals encouraged a group of hunters to capture an African rock python of massive size and transport it from Ethiopia to Alexandria (Diod. Sic. 3.36–37.9 = 5.80b; cf. Ael. *NA* 16.39).[42] The snake's keepers in Alexandria tamed it gradually by controlling its food supply, and the result was

an "incredible sight": "its tameness (*exēmerōsin*) was remarkable" (Diod. Sic. 3.37.7 = 5.80b; cf. Phot. *Bibl*. 250.78 456a = 5.80a). Giant ships transporting elephants and a tamed snake of massive size provided powerful demonstrations even to a critical observer of how much control the Ptolemies were exerting over the natural world.

Amidst such public and spectacular efforts and displays, basic categories of 'human' and 'animal' and 'foreign' and 'native' were breaking down under Ptolemaic rule, as a consequence of their efforts to tame savage animals and to produce new hybrid animals by interbreeding. Under the Ptolemies, it became apparent that animals might be trained to behave like humans, as was demonstrated by a lion that was the close companion of Berenice, the wife, perhaps, of Ptolemy I or III.[43] This lion, Aelian reported, "was no different from [Berenice's] chamber-maids. It used to cleanse her face with its tongue, and smooth away her wrinkles. And it was her table-mate, eating gently and orderly like a human being (*anthrōpikōs*)" (Ael. *NA* 5.39). Berenice's lion demonstrated, even more powerfully than the tamed rock python, just how transformative the efforts to train an animal might be. Countless more such examples were no doubt furnished especially under the rule of Ptolemy II, who organized a spectacular religious procession featuring thousands of animals of many different species, all of whom were pointedly under human control (Callixeinus of Rhodes *FGrH* 627 F 2 = Ath. 5.196a–203b).[44] The Ptolemies also engaged in efforts to provide hybrid varieties of animals by interbreeding, including at their palace in Alexandria, where they kept pheasants. Ptolemy VIII (182–116 BCE) mentioned as much, referring to Ptolemy II or his own brother Ptolemy VI, and noting that one or the other of these kings imported pheasants from Media and bred them with a Numidian variety, producing from this union a great number of birds to be eaten (Ptolemy VIII *BNJ* 234 F 2a = Ath. 14.654b–d; F 2b = Ath. 9.387e).[45] Ptolemy II was also receiving hybrid animals as gifts from allies and client-kings, who surely knew of his interest in them. Toubias, a Jewish "sheikh" in the southern region of Syria, sent to Ptolemy II the following animals, which he listed in a brief letter that accompanied them: "two horses, six dogs, one wild-mule from an ass (*hémiona*[*grion*] *ex onou hen*), two white Arabian donkeys, two foals from a wild-mule (*pō*[*lous*] *ex hēmionag*[*riou duo*]), one foal from an ass (*pōlon ex ovagriou hena*). And all of these are tame" (*P. Cairo Zeno* 1.59075.3–5).[46] Exactly what these hybrid animals mentioned by Toubias were remains in doubt, and one suggested possibility is that the "two foals from a wild-mule" may even have been the offspring of an extremely rare fertile mule.[47] Whatever they and the other creatures mentioned were, their status as a gift to Ptolemy II speaks to his willingness to experiment with breeding animals of different varieties from different regions, and to his desire to collect rare specimens that resulted from such unions. Keeping animals in their pure and untrained states was of little concern to the Ptolemies, whose seemingly limitless resources allowed them great latitude to import, train, and interbreed animals.

Ptolemaic efforts to train foreign animals even called into question the basic dichotomy of 'Greek' and 'barbarian' that was meant to divide up all of humanity. Foreign animals were strongly associated in the eyes of Greeks with their native regions, even in matters relating to human languages.[48] 'Barbarian' languages were consequently compared to the noises that animals made (e.g. Hdt. 4.183). A significant transformation to this belief occurred in the reign of Ptolemy II, when he was given a baby elephant as a gift. The elephant, Aelian reported, "was brought up with the Greek language, and understood those speaking it. Before this animal it had been believed that elephants understood only the language of the Indians" (Ael. *NA* 11.25). As much as the early Hellenistic kings made great efforts to acquire elephants, the animal was still associated strongly in the eyes of Greek with India, which was undoubtedly a barbarian land, despite the many connections drawn between it

and Greece by authors in the early Hellenistic period.[49] The discovery that an elephant could understand Greek provided reason to question this old association, and the larger idea that foreign animals were linked closely not just to their native regions, but also to the non-Greek languages that were spoken in them. Ptolemy II's baby elephant therefore provided a powerful symbol of hybridity, joining many other similar symbols that characterized the Hellenistic period. One such symbol was Alexandria itself, as viewed by Polybius, who visited the city sometime after 146 BCE.[50] He observed that the Alexandrians were a "mixed (*migades*)" people, though they "were Greeks by origin, and remembered the common custom of Greeks" (Polyb. 34.14.5 = Strabo 17.1.12 C 797). The persistence of Greekness at Alexandria, despite the 'mixing' that had taken place between Greeks and Egyptians, provides another sign that ancient scholars were more optimistic in their outlooks about the relocation of people than has been suggested. Ptolemy II's elephant, too, was an example of a positive change resulting from a relocation. If elephants could learn to understand Greek, despite their foreign origins, then perhaps people of foreign origins might also be able to become like Greeks.

Overall, the successful relocation and taming of wild animals and plants in the Hellenistic period encouraged scholars to have less rigidly deterministic views about the natural links between a land and its inhabitants. Some animals, plants, and lands were less responsive to human influence than others, but the mass relocations of plants and animals to new lands had many notable successes. No one would have denied the significant influence that a land had on its inhabitants, but the efforts of the Ptolemies demonstrated the possibility that a land itself might be reshaped by human influence, and populated with introduced plants and animals that were interbred with native varieties. As the second part of this chapter shall demonstrate, such a possibility increasingly became a reality under the Roman Empire.

Reshaping animals, plants, and lands under the Roman Empire

As was the case with the Hellenistic world in the wake of Alexander's conquests, Rome also was exposed to many new varieties of animals and plants as its empire expanded. In spite of this great influx of animals and plants, environmentally deterministic theories still persisted under the Roman Empire, and there were doubts expressed about the ability of foreign animals to live and breed outside of their native ranges. Some foreign animals, such as the peahen, were even regarded as potential sources of corruption to traditional Roman customs because of the high prices that they could command from both collectors and gourmands. In the face of such lingering doubts and hostility about the influx of foreign imports to Rome (e.g. Plin. *HN* 29.24), a pragmatic desire for profit led many to import animals and plants with considerable enthusiasm, and to attempt to improve them by experiments in grafting and interbreeding. Concerns about maintaining purity and protecting indigenous species under the Roman Empire were trumped by the possibilities of introducing animals and plants to new lands and transforming them for human benefit.

The Roman eagerness to relocate animals and plants represented a direct continuity with the attitudes of Hellenistic kings and scholars. As in so many other respects, Pompey and Caesar acted like Hellenistic kings when they introduced new and exotic animals to their people, such as a giraffe, which Caesar had brought with him to Rome from Alexandria (Plin. *HN* 8.69; Cass. Dio. 43.23.1–2).[51] Other elite Romans of the period had their own interests in animals, as is apparent, for instance, from the fashionable status attained by eels, and the major efforts that were devoted to building fishponds in which they could be bred.[52] Roman scholars, too, learned much from their Hellenistic forebears in matters relating to

botany and zoology.[53] Their interest in previous agricultural literature is apparent especially from the translation, commissioned early in the first century BCE, of an encyclopedic work on agriculture by Mago of Carthage, to which was added substantial excerpts from Greek agricultural authors.[54] This translation was cited as a source, alongside dozens of authorities from the Hellenistic period, by the polymath Varro (116–27 BCE) at the beginning of his work on agriculture (*Rust*. 1.1.8–10). As this work reveals, Varro was himself actively involved in agriculture: he owned flocks of sheep (*Rust*. 2.2.9), and he identified his own experiences as a major source for the advice that he offered (*Rust*. 1.1.11). Like Theophrastus, whose botanical works he cited frequently (e.g. *Rust*. 1.1.8, 5.1), Varro was quite willing to get his hands dirty, and to celebrate the successes of farmers, gardeners, and others in making animals and plants flourish and lands more fertile. In the first century CE, the spirit displayed in Varro's works continued to be found in technical and agricultural works written by 'new men' and members of the equestrian order.[55] The Roman political and scholarly elite kept alive the triumphant attitudes of the Hellenistic world in matters relating to plants and animals.

Roman versions of environmentally deterministic theories consequently made major allowances for the possibility that human influence could reduce the harmful impact of adverse environmental factors, and help to make a land more fertile than it naturally was. The impact of environmental factors was still acknowledged, and wide-ranging differences between lands were still held to exist, as is clear from Varro's suggestion that the northern part of the world was "more healthful (*salubriora*)" and "fruitful (*fructuosiora*)" than the south (*Rust*. 1.2.4). Like many others, Varro also singled out the temperate climate of Italy for praise, and noted that it allowed crops of all sorts to flourish (*Rust*. 1.2.4–7; cf. Dion. Hal. *Ant. Rom*. 1.36.2–37.5, Strabo 6.4.1 C 285–6, Vitr. *De arch*. 6.1.11). But Varro shared with Theophrastus the view that humanity could mitigate harmful environmental factors and reproduce or simulate ideal conditions. "Healthfulness (*salubritas*)," Varro suggested, is a product of the "climate and the land, and is in nature's power rather than ours, but it nevertheless depends much on us, because we can, with care, make [conditions] that are harmful more gentle." Whether the soil or water of a land were unfavorable, or if was too hot or had ill winds, all of these problems could be "improved" by the application of human knowledge (*Rust*. 1.4.4). A similar perspective was offered nearly a century later by Columella,[56] who also praised the great fertility of Italy, but who emphasized the help given to it by humanity: "Italy is the most compliant to human attention. It has learned to produce crops of almost the entire world thanks to the devotion applied by its inhabitants" (*Rust*. 3.8.5). Columella dismissed contemporary suggestions also that the earth was becoming less fertile with its increasing age (*Rust*. 1. *praef*. 1–2). He claimed instead that any lack of fertility was simply the result of human failings: "It is not therefore from weariness, as many have believed, nor from old age, but rather from our own laziness that the cultivated lands respond less generously to us" (*Rust*. 2.1.7). Wild plants still of course could produce "fruits and seeds" without any human assistance, Columella noted, but those plants "on which effort is applied are better suited for [producing] crops" (*Rust*. 3.1.2). Neither Varro nor Columella felt limited by seemingly deterministic environmental factors, and both of them eagerly explored the ways in which human attention could reshape a land, and make it more healthful and fertile.[57]

The optimistic attitudes of Varro and Columella were justified by the many new animals and plants that were being successfully introduced to Italy, in the face of doubts that they would be able to survive and breed outside of their native regions. A clear statement of such doubts is found in the work of Manilius, an astrological poet active in the reign of Augustus and perhaps also of Tiberius, who offered an environmentally deterministic review of the different regions of the world that concluded with a statement of their great and inevitable

diversity (*Astronomica* 4.711–43).[58] Manilius noted that different lands enjoyed unequal (*nec paribus*) levels of harvests, and he offered cinnamon as an example of a crop that fails to grow in "every field" (*Astronomica* 4.738). The range of elephants, similarly, was restricted to two regions of the earth, evidently Libya and India (*Astronomica* 4.740). Manilius' astrological perspective was answered, at least indirectly, a few decades later by Columella, who was the author of a lost work *Against the Astrologers* (*Rust*. 11.1.31). Columella declared that nature had "pronounced an equal law (*parem legem*) of fertility for plants, people, and the other animals. Nor had [nature] bestowed particular qualities to some nations and peoples in such a way that she would deny similar gifts altogether to others" (*Rust*. 3.8.1). Africa was thus not the only region where women could give birth to multiple offspring, and tall men could be found outside of Germany (*Rust.* 3.8.1–2). Plants associated closely with Judea and Arabia could also grow in Rome: "In many places of the city we see on one occasion that a cinnamomum tree [*casiam*] is putting forth leaves, and on another that it has grown quickly [*mature ampliatam*], and gardens blooming with myrrh and saffron" (*Rust*. 3.8.4).[59] Columella even offered proof that Italy could rear animals of massive size that were more closely associated with India: "We see elephants born within our walls" (*Rust*. 3.8.3). More evidence demonstrating the ability of foreign animals and plants to survive in Italy was presented by the Elder Pliny, who referred in general terms to the great numbers of animals being imported to it from all over the world (*HN* 8.38). Pliny offered one particularly telling example of this trend, which he suggested should make no one surprised about the ability of foreign birds to breed at Rome (*HN* 9.63). This example concerned the successful introduction of a prized species of fish, the parrot-wrasse (*skaros*/*scarus*), to the waters off the western coast of Italy by Optatus, a freedman of the emperor Tiberius. As Pliny explained, "for a nearly five-year period, care was employed so that [any parrot-wrasse] caught should be returned to the sea. Since then, they are frequently found on the coast of Italy, where they were not previously caught" (*HN* 9.63). The case of the parrot-wrasse, together with that of the elephant and numerous foreign plants, provided tangible proof that introduced flora and fauna could breed and even thrive in Italy, even if there was still recognition that some plants might be unable to flourish or even to grow outside of their native regions (e.g. Dioscorides 1. *praef.* 6; Plin. *HN* 14.1). Notwithstanding this recognition, and the skeptical attitude of Manilius, there was no reason for anyone to doubt that Italy could become the new home of many foreign animals and plants.

Besides skepticism about the ability of foreign animals and plants to live in Italy, people also produced questions about how much they might corrupt traditional Roman virtues. But a desire for profit and a fascination with spectacular foreign animals helped to overcome the more xenophobic responses that they inspired. The example of the peacock illustrates particularly well the complexity of Roman attitudes towards animals that were obviously foreign, but just as obviously profitable to their owners. A peacock was a quintessentially foreign animal: some Greek authors referred to it as the "Persian" or "Median" bird (e.g. Ar. *Av*. 485, 707; *Suda* μ 884, τ 99 Adler).[60] Aelian noted also that it "was brought to the Greeks from barbarian lands," and described it as a "pompous" bird that was well aware of its own beauty (*NA* 5.21). Roman observers responded to peacocks in a similarly ambivalent fashion when they were first introduced to Italy in the first century BCE. As in the Greek world, peacocks became associated with "conspicuous consumption," and were valued "for their cost more than for their flavour."[61] Varro noted that the fashion for keeping flocks of peafowl was a recent development (*Rust*. 3.6.1), and he credited the orator Q. Hortensius Hortalus as the first to serve them at banquets, a development that received more praise from "the luxurious than the strict and good" (*Rust.* 3.6.6; cf. Ael. *NA* 5.21). Varro noted also the extremely high prices commanded by peafowls and their eggs: a certain M. Aufidius Lureo was said to make an annual income

of more than 60,000 HS from breeding them (*Rust*. 3.6.1, 6). The fashion for serving the birds at banquets persisted in the first century CE (e.g. Suet. *Vit*. 13.2), and was the target of satirical responses (e.g. Juv. 1.143). But the bird's remarkable appearance and its association with Hera/Juno helped to secure it a more respectable place in the Roman world, and it commonly appeared on coinage as "the badge of empresses."[62] This beautiful, expensive, and unquestionably foreign bird still managed to be accepted in the Roman world, in spite of xenophobic reactions and concerns about its corrupting influences.

The elephant provides an even better example of the extent to which a foreign animal could overcome xenophobic responses and come to be accepted as if it were native to Italy. As in Ptolemaic Egypt, where a baby elephant proved that it could understand Greek, the intelligence of elephants and their remarkable ability to be trained contributed greatly to the acceptance that they received. Romans had long familiarity with elephants in military contexts, dating back to their wars with Pyrrhus and the Carthaginians in the third century BCE (e.g. Plin. *HN* 8.16; Polyb. 1.19.2), but they gained increased exposure to them in the first century BCE, when it seems that there existed in Italy a herd owned by the state.[63] Elephants in this period played a notable part in games and spectacles, and they proved themselves capable of creating memorable occasions for their audiences. The killing of roughly twenty elephants in a spectacle put on by Pompey in 55 even inspired a protest from the Roman audience that witnessed it, as reported by multiple sources.[64] The elephants on this occasion "sought the crowd's pity" (Plin. *HN* 8.21) and "raised their trunks to the sky" (Cass. Dio. 39.38.3) to lament what was happening to them. Cicero noted that there was "no pleasure" in the spectacle for the audience, who pitied the elephants and came away with the feeling that there existed "a certain connection between the beasts and the human race" (*Fam*. 7.1.3). A happier outcome resulted from another display involving elephants put on by Germanicus in 12 BCE (Cass. Dio. 56.27.5), which again was mentioned by multiple sources. According to Aelian, these elephants had been trained by a "dancing-master (*orchēstodidaskalos*)," who taught them to take on the roles of people attending a banquet, complete with a convincing imitation of the stumbling gait of a tipsy person (Ael. *NA* 2.11; cf. Plin. *HN* 8.4, Philo *De Animalibus* 27, Plut. *De soll. an*. 968c).[65] The performance of these animals helped to prove for Aelian that "a tamed elephant is the gentlest [animal]" and "in a certain respect human" (*NA* 2.11). Besides demonstrating that they could behave like people, elephants also proved that they could act like Greeks or Romans, according to another popular story. Three authors all reported the wonderful phenomenon of an elephant that had learned to write. The Elder Pliny claimed that the elephant wrote in Greek (*HN* 8.6; cf. Philo *De Animalibus* 28), while Aelian claimed to have himself seen an elephant "writing Roman letters with its trunk on a tablet without hesitation in a straight line" (*NA* 2.11). Aelian emphasized that the elephant even kept its gaze focused on the tablet as it wrote. "You might say," he added, "that the creature's eyes had been educated (*pepaideumenous*) and that they knew their letters (*grammatikous*)" (*NA* 2.11). Despite Aelian's hyperbole, the story provides an unquestionable sign that elephants were being associated less closely with their native ranges in Libya and India. Aelian even emphasized that the elephants in Germanicus' display were born in Italy (*NA* 2.11), recalling Columella's suggestion, already mentioned, that elephants were born "within our walls" (*Rust*. 3.8.3). Elephants increasingly were treated as if they were native animals to Italy, and they were helped along in this regard by their frequent appearances on Roman coins, and their close associations with the imperial throne.[66] A surprising sign of an elephant's imperial associations and its continuing presence in Italy came in the manual of dream-interpretation authored by Artemidorus in the second century CE. As he said, "An elephant appearing outside of Italy and India signifies danger and fear because of its color and size. For the creature

is terrifying, and especially to those unaccustomed to it. But in Italy it signifies a master, an emperor, and a great man" (Artem. 2.12). Despite their foreign origins, the intelligent and eminently trainable elephant gained the status of an animal that was indigenous to Italy.

Besides accepting new species of foreign animals, Romans were eager also to explore what benefits could come from interbreeding varieties of animals that came from different regions of the world. Maintaining the supposed purity of a particular variety of animal—it would be anachronistic to use the term 'breed'[67]—was evidently of little concern to Romans, with a few slight exceptions in the cases of horses and dogs. Columella, for instance, divided up horses into three different classes: the "noble (*generosa*)," which "provide horses for the circus and the sacred games"; a second type that was used for producing mules (*mularis*), and finally the "common (*vulgaris*)," which "produces ordinary (*mediocres*) male and female horses" (*Rust*. 6.27.1). The division of horses into the categories of "noble" and "common" recalls similar divisions used in medieval French zoological treatises mentioned already. Yet the existence of the *mularis* category complicates matters because the offspring of this type of horse were, according to Columella, "equal in price to that of the noble" (*Rust*. 6.27.1). A *mularis* horse was just as valuable as a "noble" horse, though the purpose of its existence was to produce mules, an animal that was highly valued because of, and in spite of, its hybridity. Hybridity was valued also in dogs, though again there was emphasis placed by some authors on maintaining the purity of individual varieties.[68] The clearest statement emphasizing purity comes from Ps.-Oppian, a Syrian poet active in the reign of Caracalla, who advised that it was "by far the best to keep the tribes (*phula*) [of dogs] of a single tribe (*monophula*)" (*Cynegetica* 1.398–9).[69] Ps.-Oppian nonetheless provided advice about how dogs from different regions should be "mixed" together by interbreeding (*Cynegetica* 1.376–7, 393–8). More advice on this subject came from Grattius, a poet of the Augustan Age, who concluded a review of dogs from different regions of the world with the suggestion that he "shall mix the skill of different types (*variis gentibus*)" (*Cynegeticon* 193).[70] Specific examples followed this statement: "An Umbrian mother will give to rash Gallic [puppies] nimble thought; [puppies] of a Gelonian [mother] will derive spirit from a Hyrcanian [father]; and an Aetolian with its empty barking will lose the vice if corrected by a Molossian father" (*Cynegeticon* 194–7). From a teleological perspective, Grattius' advice may provide some hints suggestive of a developing idea of different "breeds" of dogs, and of their increasing specialization under the Roman Empire.[71] But Grattius' advice speaks just as much to the Roman desire to improve animals by experiments in interbreeding, with no concern for maintaining the purity of their stock. Even in the case of horses and dogs, the value of hybrid varieties was eagerly explored.

The Roman desire to create hybrid and improved varieties of plants and animals extended beyond horses and dogs, and the cumulative impact of this desire was the transformation of the empire. The transformation was effected by the actions of people like Columella's uncle Marcus, whom he described as the "most learned and diligent farmer" in Spain (*Rust*. 2.15.4; cf. 5.5.15). Marcus delighted in experimenting with new agricultural methods, and he was joined in this habit by other elite men throughout the empire, including Galen's father, who undertook experiments in the region of Pergamum with different types of wheat and barley (Gal. *De alimentorum facultatibus* 1.37 [6.552–3 Kühn]).[72] Another similar figure was Palladius, an agricultural author of the fourth or fifth century CE whose work reveals the great extent of his travels, and his own experiences as a farmer, especially with fruit trees.[73] Palladius was interested not only in how one might get a citron tree to grow in a cold region (*Opus Agriculturae* 8.3.2), but also how one might produce seedless grapes, which he identified as an example of "nature advancing through art" (*Opus Agriculturae* 3.29.1). He revealed also how information was passing from farmer to farmer, such as a

method of grafting that would produce peaches "without stones" that he had learned from a "certain man from Spain" (*Opus Agriculturae* 3.17.8). Columella's uncle Marcus undertook similar experiments to produce improved varieties of animals, as is apparent especially from a remarkable story told by his nephew. Marcus acquired some "fierce and wild rams of a wonderful color" that had been brought from Africa to Gades for public games, and bred them once they were tamed to "coated" ewes, who were clothed with leather jackets to protect their excellent fleeces (*Rust.* 7.2.4).[74] The rams produced had coarse fleeces, but they were then bred with Tarentine ewes, a union which resulted in lambs with the soft wool of their mothers, and the desirable colors of their fathers and grandfathers. From this experience, Marcus "used to say that whatever sort of appearance that the beasts had was reproduced through the generations of their descendants, with their wildness tamed" (*Rust*. 7.2.5). Columella's story about his uncle brings into vivid detail the types of experimentation with interbreeding that the zoo-archaeological evidence suggests were taking place throughout the Roman Empire.[75] Domestic animals everywhere were being "improved" by interbreeding, whether this meant that they were becoming larger, or producing better wool, or being changed in any other way that would be beneficial to their owners.[76] The flora and fauna of the empire were being transformed by the experiments of men like Marcus Columella and Palladius, who regarded hybridity as a source of benefits, rather than something to be avoided.

The recognition by elite Romans of the possible benefits of hybridity with respect to animals and plants arguably carried over also to their perspectives on the mix of different peoples that made up the Roman population. There was, as we have already seen, hostility among elite Romans to foreign imports of all sorts, and resistance also to the idea that foreign peoples should be granted Roman citizenship.[77] But such hostility and resistance existed alongside the recognition that Roman civilization was a hybrid product, formed from the mixture of many different peoples. Even the Elder Cato (234–149 BCE), who believed that Greek influence would inevitably corrupt Rome (Plin. *HN* 29.14; Plut. *Cat. Mai*. 23.2), admitted that Rome had been settled by a mix of Greek settlers, and that Romulus spoke an Aeolic dialect of Greek (*Orig*. F 2.22 = Serv. *ad Verg. Aen.* 8.368; Dion. Hal. *Ant. Rom*. 1.11.1–4; Lydus, *Mag*. 1.5).[78] Varro made much the same acknowledgment, noting the presence of early Greek settlers and visitors in Italy before the foundation of Rome (*Ling*. 5.21, 45, 53, 101; *Rust*. 3.1.6), and pointing also to the influence of the languages of non-Greek peoples, such as the Sabines, on the development of Latin (e.g. *Ling*. 5.66, 68, 73, 74).[79] Cato and Varro both took for granted that Rome and the Latin language were hybrid products. Their perspectives on Roman history ultimately looked much like their gardens and farms, which likewise contained a mix of native and non-native plants (e.g. Cat. *Agr*. 8.1; Varro, *Rust*. 1.41.6). In the eyes of Cato and Varro, Italy had for centuries been receiving a mix of foreign peoples, just as it continued to welcome foreign plants and animals. Foreign imports might bring corruption, but it was clear also that they might be integrated almost seamlessly into Italy and Rome, whether they were plants, animals, or people.

The Roman attitude towards animals and plants was characterized most of all by the pragmatic desire for benefit and profit. Romans believed that they could reshape the lands in which they lived, and populate them with introduced animals and plants, even if these animals and plants came from regions that had significantly different environmental features. Obviously, foreign animals were accepted into the Roman world, and were tamed and trained as much as possible. There was little concern for preserving the original state of a land, and this lack of concern extended also to its indigenous population of animals and plants, which were improved by experiments in grafting and interbreeding. The flora and

fauna of the empire, along with the diverse lands that comprised it, were all thought to be under human control.

Conclusion

An optimistic attitude about the great plasticity of plants and animals emerges from the botanical and zoological literature of the Hellenistic and Roman world. Plants and animals could be relocated to new lands, grafted or interbred with other varieties of plants or animals, and cultivated or trained to suit human desires. Lands themselves could even be reshaped to make them more hospitable for all of their inhabitants—people, plants, and animals. Environmentally deterministic theories still persisted in the minds of scholars who emphasized the plasticity of the world and its living creatures, but such theories were neither limiting nor restrictive in their impact. These theories instead functioned as sources of inspiration for kings, emperors, scholars, and others, all of whom could devise plans based on their knowledge that a land shaped the character and nature of its inhabitants. Such knowledge could be exploited for benefit and profit within the expanded horizons of the Hellenistic and Roman worlds: there were endless possibilities for combining the right type of land with the right type of animal or plant. The possibilities for introducing species to new lands, creating hybrid varieties of plants and animals, and transforming entire lands were explored without any concern for preserving purity and indigeneity, at least in terms of animals and plants. How far this lack of concern carried over also to people must be the subject of further research, but such research must take into consideration animals and plants alongside people.[80]

Notes

1 For an overview of invasive species in the modern world, see Simberloff 2013. For the ancient world, note the brief treatment of introduced species in Hughes 2014, 101–2.
2 See Spear 2005, esp. 18–30.
3 The text of Zenobius is cited from the edition of Schneidewin and von Leutsch 1839–51, 1.98. Additional references to the event and its proverbial status are collected in Bodson 1978, 70.
4 For one exception to this rule, note Plin. *HN* 11.88–9, which concerns the failed introduction of poisonous scorpions to Italy.
5 See Hughes 2014, 102–5 for discussion of ancient awareness of extinction, with further references.
6 For example, Kennedy, this volume, whose focus is on pre-Hellenistic Greece. For one partial exception, note the short selection of passages relating to the topic of "Animals and Cultural Identity" in Harden 2013, 103–9. The passages collected, however, come only from historical and geographical texts, and not from zoological or botanical texts.
7 Isaac 2004, esp. 194–207. Note also the complete absence of animals and plants in McCoskey 2012.
8 Isaac 2004, 148.
9 See de Miramon 2009, 200–216.
10 See Gröning and Wolschke-Bulmahn 1992 and 2003.
11 Isaac 2004, 45 and 79, restated in Isaac 2009, 43: "I challenge anyone to show me an ancient text which claims that a people gained strength through a transformation such as moving from south to north." Contrast McCoskey 2012, 48 on the "possibility for change" acknowledged by Roman authors. Thomas 2000, 70 also questions the primacy of environmental determinism in Herodotus.
12 See Beagon 1992, 42–50 and 79–91, respectively, for discussion of ancient ideas about controlling Nature, and of the Elder Pliny's approving attitude of gardens, which he believed were "not necessarily artificial in a bad sense" (84). See also Healy 1999, 371–9 for discussion of Pliny's attitude to mining, an activity that he believed to be "the worst example of the exploitation of our planet's resources" (372).
13 See also Munson 2005, 23 on Herodotus' focus on the recent rather than distant past in his ethnographies.
14 See Romm 1992 for discussion of Greek and Roman attitudes on the "edges of the earth."

15 See Kennedy and Irby, this volume. On the authorship and date of this text, see Jouanna 1996, 79–82.
16 There are difficulties in this section of the text, and a lacuna. I follow the text given by Jouanna 1996, 222.
17 Though note McCoskey 2012, 48 on the possible "maneuverability" in the environmental theory of *Airs, Waters, Places*.
18 See Jouanna 1996, 298 n. 4, for commentary on this passage, and on the word *metaphuteontes*, which is a *hapax*.
19 Scullard 1974, 37–52, collects and discusses the main passages from Aristotle's zoological works concerning the elephant.
20 For discussion of both types of birds and their introduction to Greece, see Arnott 2007, 235–8 and 138–40. Citations from *Hist. an.* follow the numbering of books given in the edition of Balme 2002.
21 On the three passages cited, see Düring 1957, 288–90, Byl 1980, xii–iii, and Trinquier 2009, 335–9. For various suggestions relating to the elephant, see Keller 1909–13, 1.374, Scullard 1974, 64–5, and Preus 1975, 38, and the skeptical responses of Romm 1989, 573–5 and Bigwood 1993, 549–52.
22 See Byl 1980, 1–135, for an extensive review of the written sources used in the zoological works.
23 See also Asheri 1998, 269–70.
24 See Einarson and Link 1976–90, 1.viii–ix, and Fraser 1994, 172 for the dates of the works. Note also the essay of Amigues 2002, which offers a thorough introduction to Theophrastus' botanical works.
25 See Amigues 2002, 20. On Theophrastus' ability to own a garden, despite his status as a metic at Athens, see Millett 2007, 23–4.
26 On his father's profession, note Einarson and Link 1976–90, 1.vii–viii and Amigues 2002, 14–15.
27 Note the comments of Fraser 1994, 187–8.
28 I cite the *Hist. pl.* from the edition of Amigues 1988–2006; the Loeb of Hort 1916–26 should be used only with caution.
29 I cite the *Caus. pl.* from the edition of Einarson and Link 1976–90.
30 For interpretation of the former passage, and the locations mentioned, see Amigues 1988–2006, 1.123 n. 15.
31 See also the discussion of French 1994, 97.
32 For Diphilus, see Manetti 2008, 273.
33 See Thompson 1999b, 133.
34 See Thompson 1999a, 107–22.
35 See Thompson 1999b, 125.
36 Full references in Thompson 1984, 367. See also Crawford 1973, 350–63 for more on garlic.
37 See Thompson 1984, 368–9.
38 See Rostovtzeff 1922, 114–15 and Trinquier 2002, 891–3.
39 The testimonia and historical fragments of Agatharchides are collected by S.M. Burstein in *BNJ* 86, which also includes discussion of his life. See also Burstein 1989, 12–18 and Ameling 2008, 16–19.
40 See Trinquier 2002, 911–14 for discussion of the passage. The numbering of sections from the *De mari Erythraeo* follows that given in Burstein 1989.
41 For the ships, see Burstein 1989, 141 n. 3. For the elephants' route, see Trinquier 2002, 893 and Burstein 2008, 141–3.
42 On the identification of the snake and its range, see Burstein 1989, 125 n. 2 and 127 n. 1.
43 See Trinquier 2002, 894 n. 153 on the possible identities of this Berenice.
44 For extensive discussion of the procession, see Rice 1983.
45 Olson 2006–12, 7.325 n. 399 suggests Ptolemy VI, and Roller, in his commentary to *BNJ* 234 2a–b, suggests Ptolemy II.
46 For the text of the papyri, see Edgar 1925–31, 1.97–8 and Tcherikover and Fuks 1957, 128–9. See also Orrieux 1985, 158–62 for discussion of Toubias and his relationship with Ptolemy II.
47 See Hauben 1984–86, 109–11 for this suggestion, which is treated skeptically by Trinquier 2002, 892–3.
48 See Heath 2005, 200–201.
49 See Kosmin 2013, 97–115 for discussion both of the Seleucid effort to acquire elephants, and of Greek ethnographic treatments of India in the early Hellenistic period.
50 For the date, see Walbank 1957–79, 3.629.
51 See Rawson 1985, e.g. 14–15, 47–8, and 81 for the similarities between Hellenistic kings and the great Roman commanders of the first century BCE. See Jennison 2005 [1937], 4 for the significance of the animal shows put on by Pompey and Caesar.
52 Discussion and references in Higginbotham 1997, 45.

53 See Thompson 1984, 363–4.
54 See Thibodeau 2008, 265.
55 See Beagon 1992, 5–6 with further references.
56 For his life, see Martin 1985, 1960–62.
57 For a specific case study, compare the arguments of Kron 2004, 119–34, which challenge pessimistic suggestions about the environmental limitations of southern Italy for Roman livestock farming.
58 For Manilius' date, see Volk 2009, esp. 160–61.
59 I follow the text of Rodgers 2010, 106, which accepts *iam mature ampliatam* in place of *iam tuream plantam*.
60 See Bodson 2005, 455 on the tendency for foreign birds to be named after their places of origin.
61 Dalby 1996, 161.
62 Toynbee 1973, 251.
63 See Toynbee 1973, 37 and 47.
64 See Toynbee 1973, 22–3. As she notes, this was "the first and the last public protest" of a Roman audience to the sight of seeing animals killed in the arena.
65 Philo's *De Animalibus* survives only in an Armenian translation. I cite it from the edition of Terian 1981, which includes an English translation and an extensive commentary.
66 See Toynbee 1973, 42–5. Note also French 1994, 217, for the suggestion that the Elder Pliny presented the elephant as "almost a model Roman."
67 See, for instance, the discussion in Brewer, Clark and Phillips 2001, 25 and 83.
68 The suggestion of Hull 1964, 22 that ancient breeders of dogs "paid attention to the breeding of their hounds with every bit as much care as the modern hound-breeder" is an overstatement, and largely the consequence of Hull's own experience as a "modern hound-breeder."
69 For this poet and his work, see Whitby 2007, 125–34.
70 On the poet, see Meliadò 2008, 351.
71 See Brewer, Clark and Philips 2001, 90 and 102. Note also the lists of different types of dogs mentioned by classical sources in Hull 1964, 20–38 and Kron 2008, 187.
72 There is a translation of this text, with accompanying commentary, by Powell 2003.
73 For the author and his work, see Rodgers 2008, 35–6. There is also a recent English translation of his work by Fitch 2013.
74 See the discussion of the story in White 1970, 302–3, who notes that the "actual colour of these wild rams is never mentioned, which seems an unfortunate omission!"
75 For a valuable survey of the evidence and its significance, see especially MacKinnon 2004.
76 For some examples from Eastern Europe, note the summary remarks of Bökönyi 1984, 116–18.
77 For one example, note Cic. *Ad Att*. 14.12.1 on the grant of citizenship to Sicily by Marcus Antonius.
78 See Stevens 2006, 123 for discussion of Cato's views on the relationship between Latin and Greek.
79 See also Maltby 1993, 47–60.
80 I wish to express thanks to the editors of the volume, and to members of the University of Chicago's Animal Studies Workshop, whose feedback on an early draft of the paper was immensely helpful.

Bibliography

Ameling, Walter. 2008. "Ethnography and Universal History in Agatharchides." In *East & West: Papers in Ancient History Presented to Glen W. Bowersock*, edited by T. Corey Brennan and Harriet I. Flower, 13–59. Loeb Classical Monographs 14. Cambridge, MA: Harvard University Press.

Amigues, Suzanne, ed., trans. 1988–2006. *Théophraste. Recherches sur les plantes*. 5 vols. Paris: Les Belles Lettres.

——. 2002. "Les Traités Botaniques de Théophraste." In *Études des Botaniques Antique*. Mémoires de l'Académie des Inscriptions et Belles Lettres 25, 11–43. Paris: Boccard.

Arnott, W. Geoffrey. 2007. *Birds in the Ancient World from A to Z*. The Ancient World from A to Z. London and New York: Routledge.

Asheri, David. 1998. "The Achaeans and the Heniochi." In *The Greek Colonisation of the Black Sea Area: Historical Interpretations of Archaeology*, edited by Gocha R. Tsetskhladze, 265–85. *Historia Einzelschriften* 121. Stuttgart: F. Steiner.

Balme, David M., ed. 2002. *Aristotle: Historia Animalium, Volume 1. Books I–X: Text*. Cambridge Classical Texts and Commentaries 38. Prepared for publication by Allan Gotthelf. Cambridge: Cambridge University Press.

Beagon, Mary. 1992. *Roman Nature: The Thought of Pliny the Elder*. Oxford Classical Monographs. Oxford: Clarendon Press.
Bigwood, Joan. 1993. "Aristotle and the Elephant Again." *American Journal of Philology* 114: 537–55.
Bodson, Liliane. 1978. "Données Antiques de Zoogéographie. L'Expansion des Léporidés dans la Méditerranée Classique." *Les Naturalistes Belges* 59: 66–81.
——. 2005. "Naming the Exotic Animals in Ancient Greek and Latin." In *Animal Names*, edited by Alessandro Minelli, Gherardo Ortalli and Glauco Sanga, 453–82. Venezia: Istituto Veneto di Scienze Lettere ed Arti.
Bökönyi, Sandor. 1984. *Animal Husbandry and Hunting in Tác-Gorsium: The Vertebrate Fauna of a Roman Town in Pannonia*. Studia Archaeologica 8. Budapest: Akadémiai Kiadó.
Bowman, Alan K. and Rogan, Eugene, eds. 1999. *Agriculture in Egypt: From Pharaonic to Modern Times*. Proceedings of the British Academy 96. Oxford: Oxford University Press.
Brewer, Douglas, Clark, Terence and Phillips, Adrian. 2001. *Dogs in Antiquity: Anubis to Cerberus: The Origins of the Domestic Dog*. Warminster: Aris & Phillips.
Burstein, Stanley M., trans. 1989. *Agatharchides of Cnidus. On the Erythraean Sea*. The Hakluyt Society, Second Series 172. London: Hakluyt Society.
——. 2008. "Elephants for Ptolemy II: Ptolemaic Policy in Nubia in the Third Century BC." In *Ptolemy II Philadelphus and his World*, edited by Paul McKechnie and Philippe Guillaume, 135–47. Leiden: E.J. Brill.
Byl, Simon. 1980. *Recherches sur les Grands Traités Biologiques d'Aristote: Sources Écrites et Préjugés*. Mémoires de la Classe des Lettres 64.3. Bruxelles: Palais des Academies.
Crawford, Dorothy. 1973. "Garlic-Growing and Agricultural Specialization in Graeco-Roman Egypt." *Chronique d'Egypte* 48: 350–63.
Dalby, Andrew. 1996. *Siren Feasts: A History of Food and Gastronomy in Greece*. London and New York: Routledge.
De Miramon, Charles. 2009. "Noble Dogs, Noble Blood: The Invention of the Concept of Race in the Late Middle Ages." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 200–216. Cambridge: Cambridge University Press.
Düring, Ingemar. 1957. *Aristotle in the Ancient Biographical Tradition*. Studia Graeca et Latina Gothoburgensia 5. Göteborg: Almqvist & Wiksell.
Edgar, C.C. 1925–31. *Zenon Papyri*. 4 vols. Catalogue Général des Antiquités Égyptiennes du Musée du Caire 79, 82, 85, and 90. Cairo: Imprimerie de l'Institut Français d'Archéologie Orientale.
Einarson, Benedict and George Link, eds., trans. 1976–90. *Theophrastus. De Causis Plantarum*. 3 vols. Loeb Classical Library 471, 474–5. Cambridge, MA: Harvard University Press.
Fitch, John G., trans. 2013. *Palladius. The Work of Farming (Opus Agriculturae) and Poem on Grafting*. Totnes: Prospect Books.
Fraser, Peter M. 1994. "The World of Theophrastus." In *Greek Historiography*, edited by Simon Hornblower, 167–91. Oxford: Clarendon Press.
French, Roger. 1994. *Ancient Natural History: Histories of Nature*. London and New York: Routledge.
Gröning, Gert and Wolschke-Bulmahn, Joachim. 1992. "Some Notes on the Mania for Native Plants in Germany." *Landscape Journal* 11: 116–26.
——. 2003. "The Native Plant Enthusiasm: Ecological Panacea or Xenophobia?" *Landscape Research* 28: 75–88.
Harden, Alastair. 2013. *Animals in the Classical World: Ethical Perspectives from Greek and Roman Texts*. New York: Palgrave Macmillan.
Hauben, Hans. 1984–6. "'Onagres' et 'Hémionagres' en Transjordanie au IIIe siècle avant J.-C." *Ancient Society* 15–17: 89–111.
Healy, John F. 1999. *Pliny the Elder on Science and Technology*. Oxford: Oxford University Press.
Heath, John. 2005. *The Talking Greeks: Speech, Animals, and the Other in Homer, Aeschylus, and Plato*. Cambridge: Cambridge University Press.
Higginbotham, James. 1997. *Piscinae: Artificial Fishponds in Roman Italy*. Chapel Hill and London: University of North Carolina Press.
Hort, Arthur, trans. 1916–26. *Theophrastus. Enquiry into Plants*. 2 vols. Loeb Classical Library 70, 79. Cambridge, MA: Harvard University Press.
Hughes, J. Donald. 2014. *Pan's Travail: Environmental Problems of the Greeks and Romans: Ecology in the Ancient Mediterranean*. Baltimore, MD: Johns Hopkins University Press.
Hull, Denison Bingham. 1964. *Hounds and Hunting in Ancient Greece*. Chicago, IL: University of Chicago Press.

Isaac, Benjamin. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.
——. 2009. "Racism: A Rationalization of Prejudice in Greece and Rome." In *The Origins of Racism in the West*, edited by Miriam Eliav-Feldon, Benjamin Isaac and Joseph Ziegler, 32–56. Cambridge: Cambridge University Press.
Jennison, George. 2005 [1937]. *Animals for Show and Pleasure in Ancient Rome*. Philadelphia: University of Pennsylvania Press.
Jouanna, Jacques, ed., trans. 1996. *Hippocrate. Airs, Eaux, Lieux*. Paris: Les Belles Lettres.
Keller, Otto. 1909–13. *Die Antike Tierwelt*. 2 vols. Leipzig: W. Engelmann.
Keyser, Paul T. and Irby-Massie, Georgia L., eds. 2008. *The Encyclopedia of Ancient Natural Scientists: The Greek Tradition and its Many Heirs*. London and New York: Routledge.
Kosmin, Paul. 2013. "Apologetic Ethnography: Megasthenes' *Indica* and the Seleucid Elephant." In *Ancient Ethnography: New Approaches*, edited by Eran Almagor and Joseph Skinner, 97–115. London: Bloomsbury.
Kron, Geoffrey. 2004. "Roman Livestock Farming in Southern Italy: The Case against Environmental Determinism." In *Espaces Intégrés et Ressources Naturelles dans l'Empire Romain: Actes du Colloque de l'Université de Laval—Québec (5–8 mars 2003)*, edited by Monique Clavel-Lévêque and Ella Hermon, 119–34. Besançon: Presses Universitaires de Franche-Comté.
——. 2008. "Animal Husbandry, Hunting, Fishing, and Fish Production." In *The Oxford Handbook of Engineering and Technology in the Classical World*, edited by John Peter Oleson, 175–222. Oxford: Oxford University Press.
MacKinnon, Michael. 2004. *Production and Consumption of Animals in Roman Italy: Integrating the Zooarchaeological and Textual Evidence*. Journal of Roman Archaeology Supplementary Series 54. Portsmouth, RI: Journal of Roman Archaeology.
Maltby, Robert. 1993. "Varro's Attitude to Latin Derivations from Greek." *Proceedings of the Liverpool Latin Seminar* 7: 47–60.
Manetti, Daniela. 2008. "Diphilos of Siphnos." In Keyser and Irby-Massie 2008, 273.
Martin, René. 1985. "État Présent des Études sur Columelle." *Aufstieg und Niedergang der Römischen Welt* 2.32.2: 1959–79.
McCoskey, Denise Ellen. 2012. *Race: Antiquity & its Legacy*. Ancients and Moderns. London and New York: IB Taurus.
Meliadò, Claudio. 2008. "Grattius Faliscus." In Keyser and Irby-Massie 2008, 351.
Millett, Paul. 2007. *Theophrastus and His World.* Cambridge Classical Journal, Proceedings of the Cambridge Philological Society, Supplementary Volume 33. Cambridge: Cambridge University Press.
Munson, Rosaria Vignolo. 2005. *Black Doves Speak: Herodotus and the Language of Barbarians*. Hellenic Studies 9. Washington, DC: Center for Hellenic Studies.
Olson, S. Douglas, ed., trans. 2006–12. *Athenaeus. The Learned Banqueters*. 8 vols. Loeb Classical Library 204, 208, 224, 235, 274, 327, 345, and 519. Cambridge, MA: Harvard University Press.
Orrieux, Claude. 1985. *Zénon de Caunos, Parépidèmos, et le Destin Grec*. Annales Littéraires de l'Université de Besançon 320. Paris: Les Belles Lettres.
Powell, Owen, trans., comm. 2003. *Galen. On the Properties of Foodstuffs*. With a foreword by John Wilkins. Cambridge: Cambridge University Press.
Preus, Anthony. 1975. *Science and Philosophy in Aristotle's Biological Works*. Studien und Materialien zur Geschichte der Philosophie 1. Hildesheim and New York: G. Olms.
Rawson, Elizabeth. 1985. *Intellectual Life in the Late Roman Republic*. Baltimore, MD: Johns Hopkins University Press.
Rice, Ellen E. 1983. *The Grand Procession of Ptolemy Philadelphus*. Oxford Classical and Philosophical Monographs. Oxford: Oxford University Press.
Rodgers, R.H. 2008. "Palladius Rutilius Taurus Aemilianus." In Keyser and Irby-Massie 2008, 35–6.
——, ed. 2010. *L. Iuni Moderati Columellae Res Rustica; Incerti Auctoris Liber de Arboribus*. OCT. Oxford: Oxford University Press.
Romm, James S. 1989. "Aristotle's Elephant and the Myth of Alexander's Scientific Patronage." *American Journal of Philology* 110: 566–75.
——. 1992. *The Edges of the Earth in Ancient Thought: Geography, Exploration, and Fiction*. Princeton, NJ: Princeton University Press.
Rostovtzeff, Michael. 1922. *A Large Estate in Egypt in the Third Century B.C.: A Study in Economic History*. University of Wisconsin Studies in the Social Sciences and History 6. Madison: University of Wisconsin.

Schneidewin, F.G. and E.L. von Leutsch, eds. 1839–51. *Corpus Paroemiographorum Graecorum*. 2 vols. Göttingen: Vandenhoeck & Ruprecht.
Scullard, H.H. 1974. *The Elephant in the Greek and Roman World*. Aspects of Greek and Roman Life. Ithaca, NY: Cornell University Press.
Simberloff, Daniel. 2013. *Invasive Species: What Everyone Needs to Know*. New York: Oxford University Press.
Spear, Robert J. 2005. *The Great Gypsy Moth War: The History of the First Campaign in Massachusetts to Eradicate the Gypsy Moth, 1890–1901*. Amherst and Boston: University of Massachusetts Press.
Stevens, Benjamin. 2006. "Aeolism: Latin as a Dialect of Greek." *Classical Journal* 102.2: 115–44.
Tcherikover, Victor A. and Alexander Fuks. 1957. *Corpus Papyrorum Judaicarum*. vol. 1. Cambridge, MA: Harvard University Press for the Magnes Press, the Hebrew University.
Terian, Abraham, trans., comm. 1981. *Philonis Alexandrini De Animalibus: The Armenian Text with an Introduction, Translation, and Commentary*. Studies in Hellenistic Judaism, Supplements to *Studia Philonica* 1. Chico, CA: Scholars Press.
Thibodeau, Philip. 2008. "Dionusios of Utica, Cassius." In Keyser and Irby-Massie 2008, 265.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science and the Art of Persuasion*. Cambridge: Cambridge University Press.
Thompson, Dorothy J. 1984. "Agriculture." In *Cambridge Ancient History Vol. 7, Part 1: The Hellenistic World*, edited by F.W. Walbank, A.E. Astin, M.W. Frederiksen and R.M. Ogilvie, 363–70. Cambridge: Cambridge University Press.
——. 1999a. "Irrigation and Drainage in the Early Ptolemaic Fayyum." In Bowman and Rogan 1999, 107–22.
——. 1999b. "New and Old in the Ptolemaic Fayyum." In Bowman and Rogan 1999, 123–38.
Toynbee, Jocelyn M.C. 1973. *Animals in Roman Life and Art*. Ithaca, NY: Cornell University Press.
Trinquier, Jean. 2002. "Localisation et Fonctions des Animaux Sauvages dans l'Alexandrie Lagide: La Question du 'Zoo d'Alexandrie'." *Mélanges de l'École Française de Rome. Antiquité* 114: 861–919.
——. 2009. "L'animal, le Roi et le Savant: Le 'Musée' et le Développement des Savoirs sur l'Animal dans l'Alexandrie Lagide." In *Transmettre les Savoirs dans les Mondes Hellénistique et Romain*, edited by Frédéric Le Blay, 333–66. Rennes: Presses Universitaires de Rennes.
Volk, Katharina. 2009. *Manilius and His Intellectual Background*. Oxford: Oxford University Press.
Walbank, F.W. 1957–79. *A Historical Commentary on Polybius*. 3 vols. Oxford: Clarendon Press.
Whitby, Mary. 2007. "The *Cynegetica* Attributed to Oppian." In *Severan Culture*, edited by Simon Swain, Stephen Harrison and Jaś Elsner, 125–34. Cambridge: Cambridge University Press.
White, K.D. 1970. *Roman Farming*. Aspects of Greek and Roman Life. Ithaca, NY: Cornell University Press.

13

WHO READS THE STARS? ORIGEN OF ALEXANDRIA ON ETHNIC REASONING AND ASTROLOGICAL DISCOURSE

Kathleen Gibbons

'Determinism' is a term one often finds in discussions of the history of ideas, and yet is also something of a vexed category, in part because of the different implications it carries in various scholarly contexts. In contemporary studies concerning the intersection between early Christianity and ethical discourses, the term has often been invoked in the construction of 'orthodoxy' and 'heresy.' In many quarters of scholarship in the history of religions, 'determinism' has sometimes been taken as a polemical slur found especially in heresiological literature, where it has been understood to imply a denial of human agency or as an espousal of cosmic pessimism. Wilfrid Löhr, for instance, has described "the cliché of Gnostic determinism" as "part of a distinct heresiological tradition."[1]

On the other hand, in studies in the history of philosophy, it has long been recognized that an understanding of human volition and action as determined is compatible with certain conceptions of agency. Indeed, as Suzanne Bobzien has argued, theories of autonomy in which autonomy is *incompatible* with determinism—and therefore, which aim to provide an account of the indeterminate causes of human thought and action—emerged comparatively late in antiquity, and did not find clear expression until the thought of Alexander of Aphrodisias.[2] On account of scholars such as Bobzien and Michael Frede,[3] these debates about whether human autonomy requires choice to be indeterminate—debates that, in modern times, are sometimes referred to as the 'free will problem'—cannot be assumed to be an issue of contention in the ancient period.

According to an indeterminist conception of freedom, my choice is free if what I will decide, given the beliefs and mental states that I have and in the set of circumstances in which I find myself, is not fully causally determined. To put it another way, suppose that in a particular instance, I am presented with the opportunity to either eat an ice cream cone or go to the gym. In order to attribute indeterminist freedom to my actions, my current beliefs, mental states, and circumstances cannot causally determine whether I will choose to eat the ice cream cone or go to the gym. If I choose the ice cream cone now, it must be the case that, on another occasion, given the *exact same* beliefs, mental states, and circumstances, I, being

the person I am, might choose to go to the gym. Whether this kind of indeterminist freedom exists, or is required for the ascription of moral praise and blame, is generally taken to be at the heart of the 'free will problem.'

From antiquity to the modern period, however, there have been many theories of autonomy that do not require choice to be indeterminate. For many philosophers, it might be the case that, given certain beliefs, mental states, and circumstances, I, being who I am, will *always* choose to eat the ice cream cone. Given that I am the agent that I am, and given the particulars of the situation in which I find myself, it might be determined which of the two options I will take. While a *different* person might be motivated to go the gym under identical circumstances, I cannot be. Many philosophers would say that I am nonetheless the author of my action, for it is *who I am* that explains my choice. The fact that my action is determined by character and circumstance does not, for such thinkers, prevent my choice from being understood as autonomous, and therefore subject to moral praise or blame.

According to Bobzien and Frede, theories of the latter sort generally dominated in antiquity. Different philosophers, however, had different ideas about the causal factors that produced the characters that determined such choices. The Stoics, for example, maintained that autonomy exists even though one's choices are determined by one's character, which is in turn determined by a chain of antecedent causes that ultimately begins in the will of God (Cic. *Nat. D.* 2.58). Alternatively, other thinkers had available to them theories of autonomy according to which such an antecedent chain did not necessarily exist, but which understood one's volitions as deterministically produced by one's character, even if one's character is not itself the product of a larger determined causal nexus. Attention to the philosophical literature thus allows for important correctives to those studies in early Christianity that understand 'determinism' as a slur.

Such questions intersect with another complicated set of issues in the study of early Christianity, that of the role that the concept of 'ethnicity' plays in early Christian efforts at self-definition. Early Christians sometimes spoke of a 'new' or 'third' race (*genos*, *laos*, *genus*), indicating that at least some of them understood their religious affiliation in ethnic terms.[4] Several scholars have argued for taking the concept of ethnicity as illuminating for early Christian thought, including Denise Buell, Aaron Johnson, Paula Frederiksen, and, more recently, J. Albert Harrill.[5] Buell has argued that early Christians made use of what she has termed "ethnic reasoning"—the use of vocabulary about peoplehood:

> . . . to make universalizing claims, arguing that everyone can, and thus ought to, become Christian. By conceptualizing race as both mutable and "real," early Christians could define Christianness both as a distinct category in contrast to other peoples (including Jews, Greeks, Romans, Egyptians, etc.) and also as inclusive, since it is a category formed out of individuals from a range of different races.[6]

These two concepts, determinism and ethnicity, often intersect in many of the ancient discussions that come to bear on how ethnicity was alternatively understood as 'constructed' or 'essential,' concepts which are often mapped with understandings of ethnicity as 'fluid' or 'fixed,' respectively.[7] In particular, 'determinism' has sometimes been associated with the conception of ethnicity as in some sense essential and fixed.[8] Buell, for example, argues that in the context of intra-Christian polemic, "when procreative, kinship, or ethnoracial concepts are linked with rival teachings, they are held up as hallmarks of fixity and determinism."[9] In Harrill's discussion of Ephesians, he discusses how the text's "fixed mode [of constructing ethnic identity] identifies difference as stable, essential properties created by cosmic fate and

divine determinism."[10] Yet while a commitment to compatibility with determinism might *sometimes* be associated with an understanding of ethnicity or race as in certain respects 'fixed,' writers in antiquity would have had at hand theories of causation and agency which understood the changes in behavior often associated with 'fluid' constructions of ethnicity as in some sense determined.

I would here like to use Origen of Alexandria's (184/5–253/4 CE) engagement with astrological discourses as an occasion to unpack some of the challenges that arise by attending to the various concepts of 'determinism' that would have been available to ancient writers. Origen was one of the most influential theologians of the early Church, and one of the major contributors to early Christian ideas about autonomy. His thought was nevertheless controversial on account of a number of doctrines, among them his theory of the fall. In *De Principiis*, he offers a speculative account of how God originally created a noetic world in which disembodied minds contemplated God. Those minds, however, turned away from contemplation; depending upon the degree to which they fell, they became angels, demons, or human souls, which were placed in a body within the material world that God created in the second creation.[11] Some of those rational minds became celestial bodies; Origen understands the sun, moon, and stars as rational (Origen *De Principiis* 1.7.2–3; cf. Pl. *Leg*. 10, 898d–899b).[12] Life in the material world accorded human beings the opportunity to exercise their will for the better so that they might return to contemplation of God after death in the final restoration or *apokatastasis* (*De Principiis* 1.6.2, 2.1.1). While Origen was eventually condemned for his theory of the pre-existent minds, his discussions of the role of autonomy in human salvation were heavily influential in subsequent Christian thought.

In virtue of the significance of autonomy for Origen, he has often been read as an opponent of 'determinism;' most recently, Kyle Harper has argued that Origen's polemic against both certain versions of astrology and opposing Christian groups like the Valentinians was motivated by his commitment to the indeterminacy of human choice.[13] Yet as George Boys-Stones and Michael Frede have both argued, Origen's theory of will or *prohairesis*, one indebted to the Stoics, does not show evidence of such a commitment.[14] As Boys-Stones has argued, we have no textual evidence to think that Origen does not take one's actions in the material world to be determined by one's character. Rather, Origen's discussions of autonomy are distinguished from the Stoics by his commitment to a conception of character as 'entirely self-created,' a commitment evident in his view that human beings are born with the characters they are born with entirely as a result of their pre-existent choices.[15]

By considering how Origen's theory of autonomy informs his participation in astrological and ethnographic discourse, I argue that for ancient authors working prior to the development of what has been known as the 'free will problem,' the concepts of 'fixity' and 'determinism' do not so easily map onto one another. In ancient discussions of autonomy that intersect with explorations of ethnic membership, authors offering different constructions of the 'fixity' and 'fluidity' of ethnic identity debated various theories of physical and metaphysical causation that did not rely on indeterminacy for the preservation of human self-determination. Between Origen and his various interlocutors, the point of contention appears to be not *whether* volition is deterministically caused, but *what* causes are required to account for autonomous action—that is, action for which we can be held morally and rationally accountable. Rather than understand Origen's engagement with astrology as a matter of 'free will vs. determinism,' I here propose that a closer examination of what Origen has to say about the role of celestial bodies in human life illuminates his rather idiosyncratic conception of autonomy. As I will argue here, while his particular conception of

autonomy does not require human action to be indeterminate in order to be subject to praise and blame, it is nevertheless operative in his fluid conception of ethnic membership.

Ptolemy, the Stoics, and the nature of ethnic identity

In the Roman Empire, the study of astrology was invoked in a range of political and social contexts, having become "suitable as a reservoir of power, with its familiar condensed symbols and its ability to assume the guise of religious, mythical, scientific, or political discourse."[16] Astrological discourse occasionally intersected with another socially and politically infused writing practice: ethnography. As Greg Woolf has argued, 'ethnography' was not a literary genre, but a tradition of writing in which "ideas about the diversity of humankind and information about specific peoples circulated widely among those who read and wrote in antiquity."[17] The practices associated with this tradition provided a way for ancient authors to account for the diversity of human cultures,[18] and were employed by early Christians in heresiological literature, as Todd Berzon has recently explored.[19]

This intersection between astrology and ethnography appears in astrological geography, which understood the qualities of different regions of the earth, and the inhabitants within them, as governed by their different relations to the zodiac. Ptolemy of Alexandria, of the second century CE, offers us one variant of such discussions. As he says in the *Tetrabiblos*, "differences in ethnic character (*ethnikōn idiōmatōn*) occur on account of the general parallels and angles, in virtue of their relation to the circle at the center of the zodiac and the sun" (*Tetr.* 2.2.1).[20] Ptolemy outlines a range of distinguishing characteristics both in terms of physical appearance and character. In these passages, we find a more 'fixed' construction of ethnic membership, in which the chauvinistic attitudes common to antiquity are naturalized as consequences of the workings of the physical cosmos. Take, for instance, his descriptions of Ethiopians (*Tetr.* 2.2.2–3):

> For while our region is in one of the northern quadrants, those who live under more southern parallels (by which I mean those from the equator to the summer tropic), who have the sun overhead and burn, are black-skinned with thick, wooly hair, and have compact bodies and are wasted away in their physique. They are hot-headed by nature and generally savage by disposition, since their homes are continually subject to heat. These we collectively call "Ethiopians."

Those in more moderate climates, however, enjoy more moderate dispositions and exhibit superior characteristics (*Tetr.* 2.2.6–9):

> Those who live between the summer tropic and the Bears, because the sun is neither overhead nor very far from the veridical at midday, partake of a mild climate and, though the climate varies, it does not deviate a great deal in comparison to that of those who are as they are on account of the burning heat. They are medium in skin tone (*tois chrōmasi mesoi*), moderate in stature (*tois megethesi metroi*), and temperate by nature (*tais phusesin eukratoi*), and are convivial and gentle by constitution (*tais oikēsesi sunecheis kai tois ēthesin hēmeroi*). Of these, those who live more to the south are generally wittier, more inventive, and more competent with regard to inquiry into divine things on account of their being near the zodiac and the stars revolving around it. On account of this they have active souls that are intelligent, inquisitive, and amenable to making a systematic study of the field called mathematics.

To be sure, one finds degrees of variability among the cultures living in these different sectors (*Tetr.* 2.3.1). Yet the relationship of certain lands to the zodiac necessitates that the individuals inhabiting those lands will, in general, exhibit physical and moral characteristics representative of the sorts of climatic conditions produced by their relationship to the positions of the celestial bodies.

As Long observes, the theoretical foundation of astrology was in part supported by the diffusion of Stoic physics and philosophy of action among educated authors.[21] The Stoics defended a theory of human volition according to which natural causes might give rise to certain psychological states without undermining the ascription of autonomy. According to Chrysippus, the third scholarch of the school, the possibility for ascribing moral responsibility to a person for his or her actions was preserved by the fact that human beings do not act without giving their assent to a certain kind of mental representation. Yet one's mental assents and dissents are part of the larger causal nexus; every assent and dissent is determined by one's character, which is itself determined by the antecedent causes that constitute Fate (Cic. *Fat*. 40–41, Gell. *NA* 7.2.6–13).[22] According to Cicero in the evidence preserved in *De Fato*, Chrysippus understands this conception of autonomy as compatible with the idea that human character is, at least in part, a matter of climate (Cic. *Fat.* 7–8; cf. *Div.* 2.87–99):

> We see how great a difference there is among the natures (*naturas*) of different regions. Some are healthy, others are pestilential. In some places the inhabitants are almost overflowing with phlegm, in other places they are dried up and parched. And there are many other great differences between regions. In Athens the air is thin, on account of which the Athenians are thought to be wise, while at Thebes the air is heavy, and so the Thebans are thick and strong. Nevertheless the thin air does not cause someone to attend the lectures of Zeno, or Arcesilaus, or Theophrastus, nor does the heavy air cause someone to strive for victory at Nemea rather than at Isthmus . . . So therefore, just as the nature of a region bears on some things, but not on others, so does the position of the stars have power over some things, but certainly not on all.[23]

Here, Cicero attributes to Chrysippus the position that natural causes are part of a larger causal chain that determines even individual actions. Cicero does not take issue with the view that general patterns of human behavior are informed by climatic variables. For both Chrysippus and Cicero, these differences in cultural behavior are a consequence of the fact that the souls of human beings, themselves part of the cosmic *pneuma* or material soul of the universe, are affected by the different qualities of *pneuma* that constitute differing climates of different lands. What Cicero rejects is the stronger conception of the causal role of climatic factors for individual human conduct. Yet while Chrysippus' position has seemed implausible to many critics, both ancient and modern, Sedley points out that it follows from his psychological materialism; for Chrysippus, a "psychological condition is a pneumatic state. And what could have a closer bearing on your pneumatic state than the air you breathe?"[24]

Whether various Stoics understood celestial bodies as part of those natural causes that form character, however, is another issue. Anthony Long has argued that there is little evidence to indicate that the early Stoics were concerned with astrological divination.[25] While the Stoic concept of universal sympathy or *sumpatheia* might provide support for such a view, we do not find much concern with the causal influence of the stars in the early school. Among the later Stoics, however, we find some clearer evidence. Seneca, for instance, argues that celestial

bodies do count as part of the causal nexus (*Consol. ad Marc.* 18.1–3). Yet because the stars are so numerous, astrological divination is often in error (*QNat.* 2.32.7–8).[26]

The fact that natural causes feature in the formation of human behavior should not, however, lead us to overestimate the extent to which the Stoics understood any given individual's behavior as 'fixed.' As Stoic explorations of moral psychology amply demonstrate, they could understand human beings as capable of moral progress while still taking that moral progress as part of a larger antecedent chain. Consider, for instance, Epictetus (Arr. *Epict. diss.* 1.4.18–19, 21–2):

> So where is progress? If one of you, turning away from external things, has attended to his will (*epi tēn proairesin*), cultivating and tending to it so that it is brought into agreement with nature, lofty, free, unimpeded, unhindered, trustworthy, and modest, and if he has learned that the one either yearning for or fleeing from those things which are not up to him is able to be neither trustworthy nor free, but that he will necessarily be one who changes and blows about, and handing himself over to others . . . this is the one who is truly making progress, and the one who has not journeyed aimlessly from home is such a person.[27]

Given the larger context of Stoic physics, commentators have generally taken Epictetus to understand such moral progress as deterministically caused—it is caused, however, by one's own character, given the situations in which one finds oneself. Yet there are limitations on the degree of progress that a human being can make, as is evident by the fact that there are so few morally perfect people that the sage had deemed them as rare as the phoenix (Alex. Aph. *Fat.* 199.14–22).[28] These explorations of the possibility of moral progress allow for an admission of the limitations on the degree to which individual human beings can advance in virtue. Such limitations have various causal explanations, which include climatic factors discussed. In this particular sense, the Stoics provided part of the theoretical background for views like that of Ptolemy, who understood regular patterns of behavior to exist among groups of human beings while admitting room for variability.

Origen's use of Stoic psychology in his discussions of human autonomy has been well noted. Yet his rebuttal to astrology suggests a rather different set of considerations than we see in the Stoics, one that influences both his understanding of the role that the stars play in human existence and his discussions of ethnic membership. While the Stoics understand behavior of different ethnic groups as constrained by certain causal factors, Origen denies that such factors can restrict the degree of moral progress human beings are capable of. We therefore find a construction of ethnic membership as more 'fluid' than what we find in Cicero's evidence for Chrysippus; this fluidity, however, is nevertheless concomitant with its own version of ethnic chauvinism.

Origen on the cosmic role of the stars

In the second and third centuries, we find a variety of views about the nature of the stars in early Christianity, views which often intersected with the construction of categories of 'orthodoxy' and 'heresy.' Among texts that derive from the early Christian group scholars sometimes refer to as the 'Gnostics,'[29] such as the *Apocryphon of John* and the *Gospel of Judas,* those who are not part of the elect are described as enslaved to the stars. In arguing against an ascription of 'cosmic pessimism' to the authors of such works, Nicola Denzey Lewis argues that their discussions of sidereal enslavement function as part of a polemic against other Christians.[30]

Hippolytus reports that students of the Valentinian Marcus attributed letters to the numbers associated with the stars, a divination practice known as arithmomancy (*Haer.* 6.44).[31] Clement of Alexandria understood the stars as indicative, rather than causal (*Eclogae propheticae* 70.2). In this, he is close to the positions of the Jewish exegete and philosopher Philo of Alexandria (*Opif.* 45–6) and the view he himself reports in his *Excerpta ex Theodoto*, an anthology of Valentinian teachings. Clement, on this point, is also close to the Platonic philosopher Plotinus, who likewise understood celestial bodies as generally indicative of human affairs (*Enn.* 2.3.8), and not causal (*Enn*. 3.1.1, 3.2.6), although he did allow for the stars to play a causal role in some features of human life, such as physical constitution (*Enn.* 2.3.14).[32] The diversity of views on this issue reflects the way in which early Christian discussions of self-definition intersected with wider cultural discourses.

Origen, like Philo and Clement, takes the stars as indicative. In *Contra Celsum* 1.36, he argues that before Jesus' birth, it served a function for the Greeks (*Hellenes*) similar to the function of prophecy for the Jews, and in *Commentarii in evangelium Joannis* 2.25–6, that it kept them from idolatrous worship. He also notes how far the Magi were able to follow the sign of the star at the nativity of Christ (*C. Cels.* 1.58–9). With the coming of Jesus, however, the stars continue to serve as signs, but as we will see, not to human beings.[33] In this respect, Origen's views deviate from those of his contemporaries, in ways that have implications for his discussions of ethnic membership.

Many of Origen's views on astrology were preserved by Basil of Caesarea and Gregory Nazianzus in the *Philocalia*, which contains fragments from Origen's lost *Commentarii in Genesim*. Let us first consider Origen's reasons for rejecting the stars' role as causal. For Origen, because God is the creator of the cosmos, which includes the stars, understanding natural causes as part of a larger chain would leave God in some sense responsible for human wrongdoing (*Philocalia* 23.1):

> But we would ask, what did God wish to do in making the world such that some men are effeminate (*andres ontes ta gunaikōn*) but in no way the cause of their own licentiousness (*aselgeias*), while others, receiving the constitution of wild animals as a consequence of the movement of the universe through God's actions, give themselves over to cruel and altogether savage deeds, murders, and piracies? And why must we speak of the things that happen among human beings, and their innumerable sins? The champions of these excellent reasons may free humanity from every charge, but attribute to God the causes (*aitias*) of every evil and blameworthy deed.[34]

Contrast this with Chrysippus, who maintained both that human beings were authors of their actions *and* that those actions were caused by a character formed by natural factors determined by the will of God. Here Origen denies that those two positions can be maintained simultaneously, in what has sometimes been read as a rejection of determinism.[35] Yet we do not here find Origen committed to the view that human action must be *indeterminate*, but only that it cannot be causally determined by elements *within the natural world*—for if it were, the creator of the world would be part of a causal chain responsible for human misdeeds. While a *particular version* of determinism is here rejected, Origen does not reject the view that the ascription of autonomy is compatible with volition being determined by one's character. *Pace* interpreters such as Harper, this passage is consistent with the interpretation of Origen by Boys-Stones and Frede.

Origen further denies the stars' causal role by appealing to an anti-astrological argument known as the argument of *nomina barbarika* or 'customs of the nations.' According to this

argument, the fact that human beings born under different nativities obey the same laws contradicts astrological arguments that the stars cause such collective behaviors (*Philocalia* 23.16):

> I do not know how they are able to maintain that the formation of the stars at the nativity of nearly every inhabitant of Judea is such that on the eighth day they receive circumcision, having their genitalia cut and ulcerated, being subject to inflammation and sores, and requiring a doctor immediately upon entering life, while that of those Ishmaelites who lived in Arabia was such that they were all circumcised at the age of thirteen. For this is what we are told about them. And again, that the nativity of those who live in Ethiopia is such that their knee-pan is taken away, while the Amazons lose their breast; for how do the stars cause these things to happen among those peoples (*toisde tois ethnesin*)? For I know that if we inquire into the matter, we will not be able to establish any one true thing concerning these facts.

Here, common practices are presented as evidence against, rather than for, a causal relationship between the movements of the stars and human behavior. While we find common practices among human beings, these practices cannot be the product of the stars, for the nativity of any given human being is different, and yet these different human beings live according to the same rules.[36]

For Origen, however, while the stars serve as signs, they are signs that can be read only by certain rational beings—specifically, the angels and the divine powers, as well as a certain class of human beings who have transcended human nature to such a degree that they can interpret the stars with the cognitive capacity of the divine powers (such as Jacob in Genesis 49). Like Seneca, Origen argues that the calculations required to discern correctly how the stars predict certain events are too precise for human abilities (*Philocalia* 23.17). Instead, the foreknowledge of the celestial signs provided to the angels allows them to participate actively in the divine economy that aims toward the final restoration of human beings (*Philocalia* 23.20):

> I hazard that the signs (*ta sēmeia*) are made evident to the powers (*dunamesin*) that govern of human affairs such that they merely know some things, but act on others. Just as in our books, which were written for our knowledge, there are things which are written in order for us to know them, such as those things concerning creation or some other mystery, while others are made known so that we might know what we should do, such as those things concerning the commandments and the ordinances of the Lord, it is possible that the heavenly writings, which the angels and the divine powers are able to read well, include some things to be known to the angels and ministers of God (*aggelōn kai leitourgōn tou theou*) so that they may rejoice in their knowledge, and others that they, receiving them as commandments, may act.

Like the scriptures, the angels read the celestial bodies in order to receive their divine instructions. Just as human beings turn to the holy book in order to understand God's commands, the angels turn to what has been written in the sky, so that they might involve themselves in human matters in such a way as to promote their salvation. As he describes in *Contra Celsum* 5.27, different angels are assigned to different regions.[37]

Yet for all of Origen's insistence that there is good 'scientific' justification to maintain that astrology is not possible for human beings, are these views about the limitations of human

beings in making accurate and minute astrological calculations the only justification he has for denying the human ability to predict events based on astrological motions? In addition to his claims about the difficulty of achieving precision about the placement of the stars, Origen offers another justification for why God would have denied to human beings the ability to acquire knowledge of future human events. Certain foreknowledge about their own salvation would restrict their motivation to revise their character (*Philocalia* 23.10):

> Or again, let us take the case of those who, being able to struggle and resist evil in ignorance of the good foreknown by God, are able to live a virtuous life. The foreknowledge possessed by God will not be a cause of their laxity, such that they, knowing what is to come, do not actively stand firm against sin. For thus the foreknowledge of the coming good would be an obstacle. So God, ordering well all things in the cosmos, hides from us the things to come. For knowledge of those things causes us to neglect the struggle against evil, and apparent certainty of it burdens us, such that since we do not wrestle with sin, we become subject to it more quickly. And at the same time it will become an impediment to one's becoming noble and good, if one acquires the foreknowledge that one will be altogether good. In addition to the things which we possess, we are in need of much zeal and intensity in order to become noble and good. And prior knowledge that one will become noble and good weakens our practice (*tēn askēsin*). On this account it is beneficial that we do not know if we will be good or wicked.

Many in antiquity, however, conceptualized autonomy in such a way as to allow for the stars to provide knowledge to human beings without those stars having a causal role. If Origen were *only* to argue that the stars cannot serve as a material cause of human action without implicating their creator in human sin, he could allow the stars indicative influence. What, then, is at stake in this issue for Origen? In order to appreciate why Origen is so concerned to preserve the potential for human beings to be motivated to revise their character by denying that they can have knowledge of the end-times, it is necessary to consider where he situates himself with respect to debates about the nature of autonomy in the context of early intra-Christian polemic discussions which shape his particular constructivist account of the saved *genos*.

Origen's intra-Christian polemic and Israel *ex spiritu*

To understand Origen's particular stance on the question of the stars' indicative power, let us consider his disagreements with his religious competitors, the Valentinians. According to the heresiologist Irenaeus, the Valentinians divided human beings into three groups: the pneumatics, who were saved by nature; the hylics, who were damned, and the psychics, who could be either saved or damned depending upon their choices.[38] This division is not found in all of our evidence for the teachers associated with Valentinus' school; we do, however, find a similar division in the Valentinian treatise *Tripartite Tractate* (118.14–36), where the three classes are referred to as *genē*. How far the use of *genē* in the *Tripartite Tractate* can be read in ethnic terms has been debated.[39] According to Irenaeus' report, the Valentinians, believing themselves 'saved by nature' and therefore exempt from ethical strictures, led a debauched lifestyle (Irenaeus *Adversus Haereses* 1.6.3, 1.8.3–4). This is a portrait that has been widely, and no doubt correctly, taken by contemporary scholars as a polemical distortion, particularly in light of the fact that many Valentinian texts are concerned with questions about moral progress. Yet in adopting a critical approach to sources hostile to these Christians, scholars have

often done so by rejecting the label of determinism in speaking of Valentinian ethics, on the grounds that such a label would imply the denial of moral agency to human beings. Because of the Valentinian preoccupation with moral development, several interpreters have argued against taking which of the three classes a person belongs to as determined by divine choice.[40] Again, however, as scholarship in the history of ancient philosophy has amply demonstrated, many schools in antiquity seemed to have taken for granted the idea that one's character might be formed by external causes without denying the possibility of moral evaluation.

To understand Origen's engagement with the Valentinians and its implications for his views on the cosmic role of the stars, we must reconsider what was at stake for him in questions of autonomy. In his moral psychology, he draws on many core Stoic ideas. Like them, he argued that the human ability to assent and dissent to mental representations of certain kinds accounts for why human beings are properly understood as the perfect cause of their own actions (*De Principiis* 3.1.3–4; cf. *De Oratione* 6.1). Yet having established that human beings are autonomous because of this capacity, Origen goes on to explain how autonomy requires not only the capacity for assent and dissent to mental representations, but that the revision of one's character be available as well, *whatever its present condition and in whatever direction* (*De Principiis* 3.1.5):

> Again, to blame our own constitution (*kataskeuēn*) is against what is evident, since education takes the most intemperate and savage people (*agriōthentas agrious*) and, if they follow her exhortation, alters them, so that the change and alteration for the better is great, often with the most intemperate becoming better than those who before did not seem to be such by nature (*tē phusei*), and with the most savage becoming gentle in a similar way, so that those who have never been wild seem to be savage in comparison to the one who has changed toward gentleness. And let us see others, steadfast and honorable by upbringing, change toward the worse, falling from honor and steadfastness, so that they alter toward intemperance, frequently beginning to lead an intemperate life in middle age and falling into disorder after youth, which is naturally unstable, has passed. Therefore reason shows that things external to us are not up to us (*ouk eph' hēmin esti*); but to use them in this way or that, since we receive reason as a judge and examiner of how it is necessary to respond to the things which are outside us, is our work.[41]

Less technically, we might say Origen here rejects the sentiment behind the adage that "people don't really change"—for Origen, unless they *can* change, and quite radically, human beings cannot really be considered the authors of their own actions, and their actions therefore cannot be subject to praise and blame. This is a stronger conception of human autonomy than we find in many other ancient authors. As we have already observed in the case of Epictetus, the later Stoics were very much preoccupied with moral progress; yet we do not find an explicit commitment to the view that autonomy requires virtue to be motivationally open to *any and every person*, regardless of how corrupted his or her character. Such a possibility is indeed explicitly denied by Aristotle, who, in the *Ethica Nicomachea*, argued that human beings shape their characters through the performance of habit-forming actions, and are therefore responsible for their actions even when moral improvement is no longer available to them (*EN* 1114a6–19). In the context of this stronger conception of what autonomy requires, however, we do not find Origen claiming that human action or choice must be indeterminate.

Origen commits himself to this particular way of understanding autonomy in the context of his engagement with Valentinian psychology, in particular that of Valentinus' student

Heracleon. Heracleon's works do not survive; our understanding of his psychology comes from the fragments of his commentary on the Gospel of John, preserved by Origen himself in his own *Commentarii in evangelium Joannis*. In these fragments, three figures are taken as exemplars: the Samaritan woman of John 4:4–26, who represents those of a pneumatic nature, the centurion's son of John 4:43–54, who represents psychics who have chosen to follow Jesus, and the 'Jews' (Ἰουδαῖοι) of John 8:37–59, whom Jesus refers to as the offspring of the devil and who are described as psychics who have become hylics by rejecting Jesus.[42] Given his allegorical approach to scripture, exactly how far Heracleon understands the division among human beings in ethnic terms has been a subject of dispute (as in the case of the *Tripartite Tractate*).[43]

Elaine Pagels, in her groundbreaking work on Valentinian exegesis, pushed back against interpretations that understood Heracleon's division of human beings into the three groups to require the rejection of a real capacity for choice.[44] In later work on Heracleon, however, many scholars have understood the consequences of this re-examination to mean that contemporary scholarship ought to reject the idea that whatever class any given person belongs to is determined by divine choice.[45] Harold Attridge, for instance, rejects the label of determinism in arguing that the character of the various individuals Heracleon discusses are not presented as 'static.'[46] He points, for instance, to the discussion of Jesus with the Samaritan woman who, having lived in sexual sin, comes into an awareness of her pneumatic nature due to her encounter with Jesus (*Comm. Jn.* 13.92).[47] Here, the fact that the Samaritan woman, a pneumatic, is capable of turning to the pursuit of knowledge of God despite her past transgressions reveals that Heracleon does not understand character as fixed. Attridge considers also Heracleon's treatment of the Jews of John 8. These figures are identified as the 'sons of the devil,' who become hylic not by nature (*phusei*), but by adoption (*thesei*) (*Comm. Jn.* 20.213). Rejecting a supposedly 'deterministic' interpretation of Heracleon, Attridge maintains that the inclination to read him as espousing a 'rigid anthropology' is due to Origen's misrepresentation.[48]

On the other hand, the admission of the possibility of moral progress and decline does not require a rejection of the idea that human choices are determined. The evidence that survives for Heracleon does not, as Pagels observes, give any indication that he was participating in the particular sorts of technical discussions about voluntary action and moral responsibility that were being held in other corners, and in which Origen himself was engaged.[49] What exactly Heracleon's views about causation were—if indeed he had any—are unknown to us. As comparison with the Stoics illustrates, however, the fact that Heracleon discusses different individuals making different sorts of choices and demonstrating different degrees of moral improvement does not tell us anything one way or the other about whether he understood these choices to be determined.

Especially relevant to our present concern, however, is the fact that it is not at all clear from the testimony that survives whether, say, those who become 'sons of the devil' by choice can be motivated to make moral progress. That is, once certain human beings have become *superlatively* wicked, can their characters improve? Aristotle thought not; whether Heracleon thought those who choose to become 'sons of the devil' could make moral progress is unclear from the testimony that survives, and it is possible that Heracleon simply did not take a position on the matter for himself. This is, for Origen, the crucial point. While Origen, arguing that a 'son of the devil' can become a 'son of God' (*Comm. Jn.* 20.106), denies that Heracleon's psychology admits of the possibility of choice (*Comm. Jn.* 13.64), this judgment is informed by his understanding that the capacity for real choice depends on the possibility of radical moral revision. As we noted, this is a requirement that, in the context of ancient discussions of moral psychology, was far from unanimously adopted. Yet again, Origen does not argue that

moral progress requires action or choice to be indeterminate. If we attend to scholarship that has argued for the late development of the concept of *indeterminist* freedom, it becomes more evident that these disputes were disagreements about the relevant causes necessary to account for human volition, not disagreements about whether or not human action is determined.

Origen's development of, and departure from, certain contemporary ideas about autonomy in his disputes with his Valentinian rivals illuminates what is at stake for him in his rejection of the idea that human beings generally are capable of reading the stars. Merely the denial that the stars have a materially causal role to play in human life is not enough to guarantee the availability of adequate motivation to revise one's character for any and all human beings. One must also be uncertain of one's eventual soteriological state in order to be motivated sufficiently to do the moral work one must do to make progress. Such revisions, however, can still occur in the context of a moral theory, which attributes responsibility to human beings *even though* their choices—including those choices that make up moral progress—might be determined by the state of their characters given the circumstances in which those choices are made. Origen differs in this respect from others in antiquity, who argued that although the stars did not have causal influence, they could still serve as signs for human beings. This disagreement ultimately stems from Origen's insistence that autonomy requires the possibility for radical character revision, even in the case of the most vicious human beings. On this criterion, human beings can only progress because God created the universe in such a way as to ensure that such motivation was available to them—in part, by making the stars such that they served as signs to angels, rather than to human beings. Understanding Origen's position on the stars as a position dictated by his rejection of determinism therefore obfuscates what is really at stake in his engagement with astrological discourses.

Origen's conception of autonomy provides context for his rejection of the more 'fixed' constructions of ethnic membership found both in astrological geography and in the thought of the Stoics. It also shapes his constructivist conception of who belongs to the 'true Israel,' explored by Buell in her study into the role of what she calls 'ethnic reasoning' in early Christian identity. While more 'constructed' concepts of membership in modern discourse sometimes advance social justice concerns, Origen's particular construal of ethnic membership as fluid facilitates his supercessionist construction of Christianity's relationship with Judaism (*De Principiis* 3.1.23):[50]

> To those who introduce different natures (*tas phuseis*) and make use of this passage to do so, these things must be said, that if they maintain that the saved and the damned come to be "from one mixture," (Rom. 9:20) and the creator is the creator of the saved and the damned, and if he, creating not only the pneumatic ones but also the material ones, is good (for this is said by them), then it is possible that one who has become a vessel of honor (*skeusos timēs*) on account of some earlier right actions and yet not done such things here to cease from being a vessel of honor, and become in another age a vessel of dishonor (*skeusos atimias*); just as, on the one hand, it is possible through causes earlier than this life for one who has become a vessel of dishonor here, to become "in the new creation" (Gal. 6:15) a vessel of honor, made holy and useful to its master, ready for every good work (2 Tim. 21). And so the present Israelites, living unworthily of their nobility, will fall away from their peoplehood (*tou genou*), and they will change from a vessel of honor to a vessel of dishonor. And those who are at present Egyptians and Idumaeans who have approached Israel will, when they have borne more fruit, enter into the church of the Lord, no longer Egyptians or Idumaeans but becoming Israelites.

> Thus according to this position some people through the exercise of their wills (*dia tas proaireseis*) advance from worse to better, and others fall back from better to worse, and others are preserved in their noble deeds or advance from good to better, and others remains in their evil ways or, from evil deeds, being bad become worse.

We have already explored how Stoic ideas of moral progress might operate in the context of an exploration of ethnic membership which takes certain cultural behaviors as produced by certain natural causes while still allowing for a degree of variability, suggesting evidence of a comparatively more 'fixed' way of understanding human behavior despite the possibility of moral progress. Origen's stronger conception of autonomy as requiring the possibility that even the most vicious human beings might become virtuous, on the other hand, has the implication of allowing him to think of ethnic membership as comparatively more 'fluid,' a claim that has implications for his discussions of the Christian *genos*. The fact that one's choices can change whether one is a 'vessel of honor' or 'vessel of dishonor'—choices that remain available to anyone and everyone—provides the basis for a making a distinction between Israelites in the flesh and Israelites in the spirit: "For though we are Gentiles in the flesh (*in carne gentes*), in spirit (*in spiritu*) we are Israel" (*In Exodum Homila* 8.2).[51] As Buell argues, by

> . . . emphasizing the fluidity of souls (and their embodied forms), Origen appears to offer an opposing view to that of his rivals, one that not only places the responsibility for differences among humans upon the individual (not the condition of their creation) but also allows for mutability between types, including ethnic affiliations.[52]

We here find two senses in which Origen's *genos* might be described as 'fluid.' On the one hand, what it means to belong to the 'true Israel' is itself mutable. While in the time before Jesus, the Jews themselves belonged to this *genos*, after the coming of Jesus, it is his followers who belong to that group. Here, the requirements for membership to the *genos* have changed. On the other hand, whether or not any given human being belongs to that group might also be described as 'fluid,' as the character of any given human being, at any given time, is open to becoming a member of the Israel *ex spiritu*. Both what ethnic membership involves and who is a member of that ethnic group are here mutable. Neither of these positions, however, require that Origen be committed to the view that choice must be indeterminate.

Explaining human action in antiquity

Here, I have aimed to argue that the problem of determinism in the context of the history of ancient religions is something of a red herring. By exploring the ancient intersections between astrological discourse and ethnography, we can consider how debates about causation and volition were more fine-grained than the simple binary of 'determinism vs. free will.' This, in turn, allows us to consider the important implications for how we understand what is at stake in various theories about ethnic identity. Origen's thought on astrology and the function of the stars in human life complicates certain present ways of employing the concept of determinism in ancient discussions related to ethnic membership, especially as related to the concepts of 'fluidity' and 'fixity.' If we follow the warnings of Bobzien, Boys-Stones, and Frede against assuming a concern in antiquity with indeterminacy in human choice, we have no evidence that, on the issue of choices being determined by character, Origen departed from the Stoics whose thought on assent and dissent he drew upon (however much he may have disagreed with them on other matters pertaining to volition, such as the idea that character is itself produced

by a series of antecedent causes that is initiated in the will of God). Noting this raises questions about the sometimes-presumed connection between determinism and 'fixity' in our ancient authors with respect to individual moral character as well as ethnic membership. In considering how his views on the possibility of moral progress intersect with not only his positions on astrology, but also his discussions of the construction of Israel *ex spiritu*, we need not expect the 'fluidity' of ethnic boundaries to require a rejection of any and all forms of the idea that human action might be determined. In Origen's case, this fluidity only requires a rejection of moral psychologies which understand human characters as in some way caused deterministically *by natural causes* or which would deny the possibility for every human being to be motivated to improve his or her character (such as we see in Aristotle). As we have also seen, both 'fluid' and 'fixed' notions of ethnicity could be deployed for ethnically chauvinistic aims.

It may help us to situate Origen's thought on these issues if we remember that many of the authors in antiquity who understood human actions as determined were not seeking to deny human choice, but to explain it. While for Origen, the stars do not provide a material cause for human behavior, their operations do help us give an account of it—at least of the fact that even superlatively vicious human beings are capable of radical moral revision. Human beings can be motivated to revise their behavior radically in part because they are not epistemically assured of their salvation, a circumstance made possible in part by the fact that although the stars are signs, they are not signs for human beings. In this sense, Origen helps us to rethink what is at stake in ancient discussions not only of astrology and ethnic reasoning, but of causation and human volition more generally. As Denzey Lewis' study of Gnostic astrology reminds us, historians of religion have often construed determinism as associated with cosmic pessimism and a denial of human agency. Yet by exploring Origen's thought in the context of Ptolemy, Chrysippus, Cicero, and Heracleon, we might perhaps consider how many of the physical and metaphysical frameworks that might fall under the umbrella of determinism are, in fact, more concerned with exploring a natural cosmos that is open to human investigation and explanation, as we find in these different thinkers' disagreements about the causes at play in human choice and action. In antiquity, such a cosmos not only included astrological bodies and earthly climates but also moral agents, human cultures, and angelic intermediaries.[53]

Notes

1 Löhr 1992, 381.
2 Bobzien 1998.
3 Frede 2011.
4 *Ep. ad Diognetus* 1; *Ep. Barnabae.* 5; Aristides *Ap.* 16; Clem. Al. *Strom*. 6.41.7; Tert. *Ad Nat*. 1.8, *Scorp*. 10; McGowan 2001.
5 Buell 2005; Johnson 2006, 2014; Fredriksen 2010; Harrill 2014; cf. Gruen 2013.
6 Buell 2005, 3.
7 See Weeda, this volume, for more on the concepts of 'fixed' and 'fluid.'
8 There may be some overlap between the idea of 'fixed' identity and the concepts of purity and anti-miscegenation discussed in Kennedy, this volume.
9 Buell 2005, 122.
10 Harrill 2014, 389.
11 Origen *De Principiis* 1.8.1–2; 2.6.3–6; 2.8.3–4; 2.9.1–6.
12 Possekel 2012, 534–35.
13 Harper 2013, 118–26.
14 Boys-Stones 2007; Frede 2011.
15 Boys-Stones 2007, 495–6.
16 Barton 2002, 62.

17 Woolf 2010, 14.
18 Woolf 2010, 32–58.
19 Berzon 2013.
20 Translation based off of text from F. Boll and E. Boer's 1940 Teubner edition. For a more lengthy discussion of Ptolemy's cosmography as it relates to ethnicity, see Komorowska, this volume.
21 Long 1982, 191.
22 Inwood 1985, 42–103; Salles 2005, 69–90; Bobzien 1998, 234–329.
23 Translation based off of text from Robert Sharples' 1991 Aris and Phillips Ltd. edition.
24 Sedley 1993, 131; cf. Bobzien 2001, 295–301.
25 Long 1981, 166–72.
26 Barton 2002, 50–51; Inwood 2005, 197.
27 Translation based off of text from W.A. Oldfather's 1925 Loeb edition.
28 Bobzien 2001, 330–57.
29 Layton 1995; Brakke 2010.
30 Denzey Lewis 2013.
31 Barton 2002, 181.
32 Long 1981, 187–8.
33 Hegedus 2007, 329–38.
34 Translation based off of text from Éric Junod's 1976 *Sources Chrétiennes* edition.
35 Harper 2013, 118; Scott 1994, 145; Possekel 2012; Benjamins 1994.
36 Hegedus 2007, 96–7.
37 Possekel 2012, 537.
38 Irenaeus *Adversus Haereses* 1.5.1; 1.5.4; 1.5.6.
39 Buell 2005, 84.
40 Buell 2005, 126–35, Dunderberg 2008.
41 Translation based off of Henri Crouzel and Manlio Simonetti's 1978 *Sources Chrétiennes* edition.
42 Einar Thomassen has proposed that Heracleon is here engaged in intra-Valentinian polemic in rejecting the idea that some people are hylic by nature (Thomassen 2010, 191).
43 Dunderberg 2008, 141–4.
44 Pagels 1989.
45 Aland 1977, 158–9; Wucherpfennig 2002, 338–9.
46 Attridge 2005, 67.
47 All text cited from Cecile Blanc's 2006 revision of Erwin Prescheun's 1975 *Sources Chrétiennes* text.
48 Attridge 2005, 70.
49 Pagels 1989, 104.
50 Buell 2009, 120–28.
51 Translation based off of J.-P. Migne's 1862 *Patrologia Graeca* edition.
52 Buell 2005, 124–6. Buell denies that Origen's polemic accurately represents the views of Valentinus, on the grounds that the *Tripartite Tractate* distinguishes between the different classes of human being on the basis of their different choices and actions (Buell 2005, 125–8). Again, however, it should be noted that Origen espouses a very specific notion of autonomy, one that many in both antiquity and in modern times would deny that human beings have.
53 The author would like to thank the editors, whose thoughtful suggestions improved this piece greatly.

Bibliography

Aland, Barbara. 1977. "Erwählungstheologie und Menschenklassenlehre: Die Theologie des Herakleon als Schüssel zum Verstandnis der Christlichen Gnosis?" In *Gnosis and Gnosticism: Papers Read at the Seventh International Conference on Patristic Studies*, edited by Martin Krauss, 148–69. Leiden: E.J. Brill.

Amand, David. 1945. *Fatalisme et Liberté Dans l'Antiquité Grecque: Recherches sur la Survivance de l'Argumentation Morale Antifataliste de Carnéade chez les Philosophes Grecs et les Théologiens Chrétiens des Quatre Premiers Siècles*. Louvain: Bibliothèque de Louvain.

Attridge, Harold. 2005. "Heracleon and John: Reassessment of an Early Christian Hermeneutical Debate." In *Biblical Interpretation: History, Context, and Reality*, edited by Christine Helmer and Taylor Petrey, 157–72. Atlanta, GA: Society of Biblical Literature.

Barton, Tamsyn. 2002. *Power and Knowledge: Astrology, Physiognomics, and Medicine under the Roman Empire*. Ann Arbor: University of Michigan.
Benjamins, Hendrik S. 1994. *Eingeordnete Freiheit: Freiheit und Vorsehung bei Origenes*. Leiden: E.J. Brill.
Berzon, Todd. 2013. "Heresiology as Ethnography: Theorizing Christian Difference." *Religious Competition in the Third Century C.E.: Jews, Christians, and the Greco-Roman Worlds*, edited by Nathaniel DesRosiers, Jordan Rosenblum and Lily Vuong, 179–91. Göttingen: Vandenhoeck and Ruprecht.
Bobzien, Susanne. 1998. "The Inadvertent Conception and Late Birth of the Free-Will Problem." *Phronesis* 43: 133–75.
——. 2001. *Determinism and Freedom in Stoic Philosophy*. Oxford: Clarendon Press.
Boys-Stones, George. 2007. "Human Autonomy and Divine Revelation in Origen." In *Severan Culture*, edited by Simon Swain, Stephen Harrison and Jan Elsner, 489–99. Cambridge: Cambridge University Press.
Brakke, David. 2010. *The Gnostics: Myth, Ritual, and Diversity in Early Christianity*. Cambridge, MA: Harvard University Press.
Buell, Denise. 2005. *Why This New Race? Ethnic Reasoning in Early Christianity*. New York: Columbia University Press.
——. 2009. "Early Christian Universalism and Modern Forms of Racism." In *The Origins of Racism in the West*, edited by M. Eliav-Feldon, B. Isaac and J. Ziegler, 109–31. Cambridge: Cambridge University Press.
Denzey Lewis, Nicola. 2013. *Cosmology and Fate in Gnosticism and Graeco-Roman Antiquity: Under Pitiless Skies*. Leiden: Brill.
Dunderberg, Ismo. 2008. *Beyond Gnosticism: Myth, Lifestyle, and Society in the School of Valentinus*. New York, NY: Columbia University Press.
Frede, Michael. 2011. *A Free Will: Origins of the Notion in Ancient Philosophy*. Berkeley, Los Angeles and London: University of California Press.
Fredriksen, Paula. 2010. "Judaizing the Nations: The Ritual Demands of Paul's Gospel." *New Testament Studies* 56: 232–52.
Fredriksen, Paula. 2014. "Paul, Practical Pluralism, and the Invention of Religious Persecution in Roman Antiquity." In *Understanding Religious Pluralism: Perspectives from Religious Studies and Theology*, edited by Peter Phan and Jonathan Ray, 89–113. Eugene, OR: Wipf and Stock.
Gruen, Eric. 2013. "Did Ancient Identity Depend on Ethnicity? A Preliminary Probe." *Phoenix* 67: 1–22.
Harrill, Albert J. 2014. "Ethnic Fluidity in Ephesians." *New Testament Studies* 60: 379–402.
Harper, Kyle. 2013. *From Shame to Sin: The Christian Transformation of Sexual Morality in Late Antiquity*. Cambridge, MA: Harvard University Press.
Hegedus, Timothy. 2007. *Early Christianity and Ancient Astrology*. New York: Peter Lang.
Inwood, Brad. 1985. *Ethics and Human Action in Early Stoicism*. Oxford: Clarendon Press.
——. 2005. *Reading Seneca: Stoic Philosophy at Rome*. Oxford: Clarendon Press.
Johnson, Aaron. 2006. *Ethnicity and Argument in Eusebius'* Praeparatio Evangelica. Oxford: Oxford University Press.
Johnson, Aaron. 2014. "Ethnicity: Greeks, Jews, and Christians." In *A Companion to Ethnicity in the Ancient Mediterranean*, edited by Jeremy McInerney, 379–89. Oxford and Malden, MA: Wiley-Blackwell.
Layton, Bentley. 1995. "Prolegomena to the Study of Ancient Gnosticism." In *The Social World of the First Christians: Essays in Honor of Wayne A. Meeks*, edited by L. Michael White and O. Larry Yarbrough, 334–50. Minneapolis, MN: Fortress.
Löhr, Wilfrid. 1992. "Gnostic Determinism Reconsidered." *Vigiliae Christianae* 46: 381–90.
Long, Anthony A. 1982. "Astrology: Arguments Pro and Contra." In *Science and Speculation*, edited by J. Barnes, J. Brunschwig, M. Burnyeat, and M. Schofield, 165–92. Cambridge: Cambridge University Press.
McGowan, Andrew. 2001. "'A Third Race' or Not: The Rhetoric of Ethnic Self-Definition in Tertullian." Paper presented at *Patristica Bostoniensia*, Boston.
Muehlberger, Ellen. 2013. *Angels in Late Ancient Christianity*. Oxford: Oxford University Press.
Pagels, Elaine. 1989. *The Johannine Gospel in Gnostic Exegesis*. Atlanta, GA: Society of Biblical Literature.
Possekel, Ute. 2012. "Bardaisan and Origen on Fate and the Power of the Stars." *Journal of Early Christian Studies* 20: 515–41.

Salles, Ricardo. 2005. *The Stoics on Determinism and Compatibilism.* London: Ashgate.
Scott, Alan. 1994. *Origen and the Life of the Stars: A History of an Idea*. Oxford: Oxford University Press.
Sedley, David. 1993. "Chrysippus on Psychophysical Causality." In *Passions and Perceptions: Studies in Hellenistic Philosophy of Mind*, edited by Jacques Brunschwig and Martha Nussbaum, 313–31. Cambridge: Cambridge University Press.
Thomassen, Einar. 2010. "Heracleon." In *The Legacy of John: Second-Century Reception of the Fourth Gospel*, edited by Tuomas Rasimus, 173–210. Leiden: Brill.
Woolf, Greg. 2010. *Tales of the Barbarians: Ethnography and Empire in the Roman West*. Oxford and Malden, MA: Wiley-Blackwell.
Wucherpfennig, Answar. 2002. *Heracleon Philologus: Gnostische Johannesexegese im zweiten Jahrhundert*. Tübingen: Mohr Siebeck.

14

CLIMATE AND COURAGE

Georgia Irby

Introduction

In *de Re Militaris*, Vegetius (late fourth century CE) provides valuable insight into the ethnographic outlook of the Roman military machine, whose prejudices stem from long-established climatological theories. He includes a particularly intriguing tidbit concerning where best to recruit soldiers (*Mil.* 1.2): men from cold climates have an overabundance of blood, but they lack intelligence—a state not conducive to camp discipline. Those from warmer regions may have more intelligence, but their paucity of blood renders them afraid of receiving wounds and, therefore, they make poor soldiers (see further Aristot. *Pol.* 1327b).[1] The best troops are levied from temperate climates. Vegetius here strongly evokes Vitruvius (6.1), who notes the same connection between climate, blood, and courage. Vegetius also echoes Strabo 6.4.1, who attributes the rise of Rome to her medial and temperate, yet varied, climate.

This trajectory is hardly new to Vegetius. Ethnographic digressions in Caesar (*B Gall.* 6.11–28), Tacitus (*Ger.*), and other writers underscore the effect of climate on military efficacy and discipline. This underpinning, furthermore, has its origins in Greek philosophy and medical theory. The Greeks were aware of climatological differences, and their ensuing theories of geographical determinism affected their anthropological outlook. Climate shapes character, including courage and belligerence.

We shall first explore the underpinning Greek ethno-climatological theories and Roman interpretations in order to understand the concepts underlying Vegetius' declaration. We shall then turn to the question of recruitment and military medicine in the broader context of ethno-climatological theory in order to investigate to what extent such premises influenced the Roman philosophy and practice of military medicine, nutrition, and health.

Environment and courage before Vegetius

Herodotus

For Herodotus, the triad of climate, character, and intelligence weaves an interlocking arc. Climate is a prelude to Herodotus' accounts of the peoples, manners, and institutions of a place, and he explores the connections between climate and culture. For example, the Egyptians

are the healthiest peoples, after the Libyans, because their climate lacks seasonal variations (2.77.3) (see below on Hippoc. *Aer.*).[2] In Herodotus, however, climate is largely an analogy for characteristics rather than their cause (e.g. 2.35.2: *Aigyptioi hama tō ouranō*—the Egyptians exist *together with* their climate, not because of it). Herodotus makes no inverse claims for the effects of the harsh Scythian winters on the health of the Pontic peoples.[3]

Herodotus' connection between the "habitat and habits" of the peoples of Scythia is nuanced.[4] Progressing systematically through the complex and varied topography of the Pontic region, Herodotus carefully distinguishes different races of Scythians, among them the Greek-like Kallipidai, savage man-eating Androphagoi, nomads, and Thyssagetai, who live exclusively by hunting (4.18–22). Overall, the climate is harsh, the terrain is uncrossable at the northernmost regions, the territory beyond the Issedones is entirely unknowable (4.25.2), and the lands and airs there are full of "feathers" (*pterōn*: 4.7.3) that obscure visibility during the eight-month-long winter (4.28).

The bleak landscape is reflected in the customs of the equally acrid inhabitants. Cold does not engender intelligence (see below), and Herodotus identifies the people of the brutally harsh Pontic region as the most foolish peoples (*amathestata*). The Scythians alone possess any small degree of wisdom (4.46). Yet even the relatively clever Scythians were unable to learn the language of their Amazonian wives (4.117), and only one Pontic man, Anacharsis, was ever noted for wisdom (4.46.1, 76–7). Scythia, the youngest of human cultures, was xenophobic, and its inhabitants even denied ever having heard of their solitary sage. Furthermore, the rash Scythians were inclined towards folly. After issuing an ultimatum to Darius (the enigmatic Scythian "gift" of a bird, mouse, frog, and five arrows in answer to Darius' demands for "earth and water," 4.131.1)[5] and eager to engage the Persians in battle, the ranks of the massed Scythian army degenerated into a spontaneous, disorderly hare-hunt, with results both comic and alarming.[6] Concluding that these men were mocking him, and hoping to avoid further humiliation, Darius capitulated to the sage counsel of his advisor Gobryas who had urged retreat since it would be would impossible to fight such irrational, unpredictable men (4.134.2).

Clearly, these peoples were brave, and the bravest (*andrēotatoi*: "manliest") were the Getae, who were also stupid and foolishly arrogant (4.93).[7] Also brave (and noble) were the royal Cimmerians, not afraid to shed their own blood in defense of their homeland; the Scythians, thus, satisfy one of Aristotle's definitions of courage: law *(nomos)* requires that the courageous man (*ta tou andreiou*) fulfill his military obligations (*Eth. Nic.* 1129b19–20). Facing invasion from the nomadic Scythians from the east, the royal Cimmerians preferred to defend their land at any cost rather than to abandon it (4.11), to Herodotus' mind a noble plan. After heated debate, the Pontic royals divided themselves into two groups to fight to the death. They were then buried in their own land by the commoners who subsequently fled, leaving a deserted countryside to the Scythians who thus came to occupy the land.

Doubtless, then, the brutality of the Pontic land is mirrored in the peoples who possessed it, and Scythian culture was particularly harsh. They honored Ares in a distinctive way, with offerings of horses and other animals slain by the sword, as well as with blood offerings of one out of every hundred enemy soldiers taken alive. Blood collected from the slit throats of these human sacrifices was poured onto Scythian swords, and the victims' right arms were slashed off, left where they fell (4.62).[8] Thus the Scythians humiliated their enemies and neutralized their strength, lest from the grave they might seek vengeance.[9] The novice Scythian warrior also drank the blood of the first man he slew (4.64; see also Mela 2.12; Tac. *Germ*. 31). Enemy scalps were collected and displayed (or even worn as cloaks), fingernails were utilized as covers for quivers, and skulls of the most hated enemies were employed as drinking cups

(4.64.2–65).[10] Centuries later, Vergil sketches an image of merciless Scythian hunters who in midwinter gleefully hunt their prey, without the civilizing accoutrements of hunting dogs or nets (*Geor*. 3.374–5).[11]

For many reasons (oracles aside), the tremendous Persian war machine was unable to vanquish the stubborn Scythians. They knew their varied and harsh landscape intimately, and they utilized it to full advantage: aggressors were prevented from escape; no Scythian could be overtaken unwillingly (4.46.2). The Scythians employed a brilliant strategy of tactics, constantly merciless, like their ruthless land. As expedient, the Scythians retreated from or taunted the Persians with unguarded livestock to entice them to extend their military campaign into the harsh winter months, which they could surely not endure (4.130). They devastated their verdant countryside, keeping a day's march ahead of the enemy (4.122.1, 125.1), traveling with their dwellings (wagons) and surviving by hunting (4.46.3), leaving nothing for the invaders (4.122.1) in advance of the deadly winter (4.130; see also *Aer.* 19).[12] Although Thomas may argue that Herodotus attributes Scythian success to the rivers and not climate (4.47),[13] it is the environment—climate, topography, and geography together—that shapes the Scythian peoples; even the topography of Scythia is in harmony with the people, who use the waterways to their advantage. Scythia provides the perfect symbiosis of climate and character. Climate shapes *mores.* Climate forges livelihood, outlook, and also military philosophy and approach.

In contrast, gentler climes forge peoples of indolence, cowardice, and laxity. There were no peoples of Asia Minor more courageous (*andreioteron*: "more manly," 1.79.3) than the Greek-like Lydians (1.94.1), until they were conquered by Cyrus, and thus lost their freedom.[14] Before succumbing to the Persians, the Lydians in their turn had already vanquished the Ionian Greeks: if the Lydians could be corrupted, then so too could the Greeks. After the erstwhile strong and brave Lydians came under Persian hegemony, they were forced to succumb to the seductions of luxury, which rendered them emasculated (1.154.4).[15] Even the Ionian Greeks of Asia Minor are cast as having acceded to the effeminacy that pervades their mild territory (the Greeks of Halicarnassus, Herodotus' hometown, are uniquely exempt).[16] The Scythians adumbrate Cyrus' Ionian allies as the most worthless and cowardly men of the entire human race (4.142). Herodotus, further, observes, that a life of luxury leads to weakness and ill health; for example, since the Persians avoided exposure to direct sunlight by shading themselves and wearing felt caps, their skulls are thin and easily cracked (3.12.4).[17]

The harshness of the Scythian climate reflects and enhances the hardiness, obdurate determination, and courage of the Pontic men. Herodotus, in fact, emphatically recapitulates the connection between the peoples and the lands which support them in the penultimate sentence of the final book, Cyrus' cautionary declaration that "soft men hail from soft places": *gar ek tōn malakōn khōrōn malakous ginesthai* (9.121.3). The land complements its inhabitants.[18] The Scythians, inhabiting a harsh, cold climate, are bold in war, generally disciplined, and they succeed in thwarting the Persian invasion; the Persians dwelling in a gentle region are soft, manifestly undisciplined, and they ultimately fail against the Greeks.

The Hippocratic corpus: Airs, Waters, Places

Herodotus was working within the parameters of contemporary philosophy, and his approach was often empirical and even "scientific." The climatological ideas espoused in Herodotus find expression in the Hippocratic corpus and elsewhere.[19] Herodotus' ethnographical ecphrases, furthermore, seem to draw on advances in Ionian natural philosophy and medicine.[20] Climate and character are parallel in both Herodotus and the Hippocratic *Airs, Waters, Places* (c. 430 BCE).[21] While the human characteristics parallel climate incidentally in Herodotus, climate causes

character in *Aer*. The temperate climate of Asia Minor, situated "midway between the heat and the cold," fosters mildness and gentleness of temper (*Aer.* 12) in both its inhabitants and topography, rendering them uncourageous in war.

Like Herodotus, our Hippocratic author treats the Scythians as a case study in the interstices between climate, topography, and character.[22] For the Hippocratic author, climate is the etiology of character and features. In short, like their wintry land, the northern Scythians are chilled, watery, and almost barren (*Aer.* 19) because of the wet and frosty climate. In both the Hippocratic author and Herodotus, the "wateriness" (*ikmas*) of the Scythians is in antithesis with the dryness of Libya. Likewise, Herodotus employs the same word (*ikmas*) when noting that the Libyan land is utterly lacking in moisture (4.185.3).[23] This moistness explains Scythian infertility—they are the most "eunuch-like" people on earth (*eunouchoeidestatoi*: *Aer.* 22; "man-women" in Herodotus [*androgunoi*: 4.67.2]), and their barrenness is exacerbated by their harsh equestrian lifestyle (*Aer.* 21).[24] Excessive congenital moisture also makes the people weak, unable to stretch their bows or hurl javelins, unless they have been cauterized of excess dankness (*Aer.* 20), whereby strength can be regained.[25] Like their own vegetation and livestock, the dewy Scythians are small and weak.

Privileging climate over culture and descent (*Aer.* 12), the Hippocratic author explains how climate accounts for character. Despite contradictions within the text,[26] he generally agrees with Herodotus' ethno-geographical assessments. In Asia, he says, "the country is milder, and the dispositions of the inhabitants also are more gentle and affectionate . . . manly courage (*andreion*) . . . could not be produced in such a state of things . . . for there pleasure necessarily reigns." This statement is in striking correlation with Cyrus' cautionary "soft men hail from soft places."[27] Pleasant climates produce indolent men.

Noting also the connection between climate and character in Europe (*Aer.* 23; see also Galen *Capacities of the Soul* 8), our Hippocratic author describes "great and frequent" changes—hot summers, severe winters, protracted drought, frequent rains and winds—in the European seasons and their effects on embryonic development. Generative development alters according to meteorological conditions: the more variable the weather, the more frequent are embryonic vitiations, which result in greater physical diversity.[28] Europeans do not all look alike, nor do they act or think alike because of these embryonic debasements, which are dependent on extremes in the weather. Climate, constitution, and disposition are interlinked. Uniformity of climate engenders slackness and indolence, thus fomenting cowardice (*deiliē*); variation fosters wildness and endurance in body and soul, feeding bravery (*andreiai*) (*Aer.* 23). Thus, Europeans in their variable environment are more courageous (*eupsuchoterous*: "well-souled") and warlike (*machimōteroi*) than Asians in their moderate and unchanging environment. This bellicosity and courage are further promoted by the mountainous, rugged, elevated, and well-watered European terrain "where the changes of the seasons are very great." Such people "naturally have courage" (*andreion*: *Aer.* 24). When addressing the topic centuries later, Strabo adds that the variable climate of Europe, diversified with plains and mountains, supports two human elements dwelling side by side: the more populous peace-loving agriculturalists as well as an abundant warlike population. Strabo, however, includes Hellenes and Romans under a much larger rubric of "Europeans" (2.5.26) than envisioned in *Aer.*, and it is the system of government (or its absence) that regulates character, a theory borrowed from Aristotle.

Aristotle

For Aristotle, courage in particular (and virtue in general) is not necessarily a condition of climate. Courage is rather the ability to face a noble death without fear (*Eth. Nic.* 1115a32–4).

All (Greek) people are born with the natural disposition for all virtues as granted by nature (*phusei*), but we are not, by nature, necessarily virtuous. Although everyone possesses the potential for justice, wisdom, and courage from birth (*Eth. Nic.* 1144b5–6), virtues must be cultivated (*Eth. Eud.* 1220a29–32; Galen *Affections and Errors* 1.4).[29] Courage, like other virtues, requires a mindful, rational choice (*Eth. Nic.* 1117a). Aristotle defines courage as the balance between rashness and cowardice (just as all virtues stand between two vices: *Eth. Eud.* 1220b31–1221a15).[30] It is not courageous to face danger through ignorance,[31] or with passion (*dia thumon*: *Eth. Eud.* 1229b26–8). The just man chooses not to act unjustly, while the coward deliberately elects to perform base actions (*Eth. Nic.* 1137a20; see 1228a23–30a36). Wild boars only appear courageous (*andreioi dokousin einai*) when they veer from their natural state. Boars act on instinct, not reason, and their personalities are unpredictable, irrational, and uneven (*Eth. Eud.* 1229a25–7). Furthermore, courage among non-Greeks is tinged with "passion" (*thumos*: *Eth. Eud.* 1229b29–30), as, for example, when the Celts, whose "courage" (*andreia*) is accompanied by "passion" (*meta thumou*), make war on the Ocean (*Eth. Eud.* 1229b29). Generally speaking, however, repeated action, habit, and community can foment excellence of character; and courage, like other moral virtues, must be chosen for its own sake.[32]

Aristotle, nonetheless, nebulously links climate to human intelligence. In *Politica* book 7, we are told that people dwelling in cold places and those in Europe are full of spirit (*thumou*), but they are wanting in intelligence and skill. Thus, although the Europeans retain their freedom, they lack political organization. The peoples of Asia are intelligent and skillful in temperament, but they lack passion (or spirit) (*athuma*),[33] so they are in continuous subjection and slavery (*Pol.* 1327b24–9). For Aristotle, *thumos* is an irrational, though completely natural, characteristic that denotes spirit or anger (*Eth. Eud.* 1223b, 1225b), but it often resembles courage (1229a21) and can prove useful in instilling true courage in danger (1229a30; see also *Eth. Nic.* 1116b30–31). Echoing Herodotus and anticipating Strabo and Pliny, Aristotle suggests that the intermediate geographical position of Greece, between chilly Europe and warm Asia Minor, engenders an intermediate type of character, both high-spirited and intelligent (1327b29–30), enabling the best type of governments.[34] For Aristotle and his school, environmental mixture and moderation yield the best body-type, constitution, and character. Those who dwell in climates with extremes in temperature—cold or heat—are "beast-like" in manners and appearance ([*Prob.*] 909a1), because imbalances and extremes in the environment disturb the mind and distort the body, a theory adhering directly with the ethno-climatological arguments in *Aer.* The Aristotelian author, however, withholds further meteorological comment. Although Europe is chilly, we are left to assume that Asia Minor is hot and that the Greeks enjoy a temperate climate.

Courage is largely an ethical question in Aristotle, with a single physiognomic exception.[35] From examining "the entire animal kingdom," the Aristotelian author of the *Physiognomonica* infers that soft hair (as on deer or rabbits) indicates cowardice (*delon*), coarse hair (as on lions and wild boar) suggests bravery (*andreion*) (806b6–16). Here physiognomics, not climate, shapes character. The quality of blood, nonetheless, is a determinant of intelligence:[36] animals with watery blood are smarter because sensibility is more easily affected by thinner, purer fluids (*Part. An.* 650b15–651a15). Thus, bees and other "bloodless" animals are naturally more intelligent than many blooded animals, and blooded animals, whose blood is thin and cold, are more intelligent than those with thick blood (648a2–13).[37] Best of all are those creatures whose blood is hot, thin, and clear (see Galen *Capacities of the Soul* 6). Such animals possess both intelligence and courage. For Aristotle, we recall, blood is the generative material. Furthermore, in the Aristotelian *Problems*, bravery is connected to the quality of being full of heat and

having an abundance of blood in the lungs ([*Prob.*] 948a13–19). Bodily heat is the source of strength in the spirited soul, and heat links physical attributes to character.[38] Conversely (and contrary to theories espoused in the *Aer.* where topography and technology can counteract moist climates), constitutionally wet creatures are timid, because moisture has a cooling effect, and coolness precipitates fear.[39] Fearful men, consequently, are cold because their blood (and heat) descends to the lower parts of the body (947b28–9), thus producing a sensation of fear (chilling) in cowardly men, but men become courageous as blood rises and accumulates in the heart (948a15–16). The author is far from explicit, and he may (or may not) believe that each human body contains a set quantity of blood. However, it is clear that blood (and heat, or its lack) is considered a factor in defining courage or cowardice: blood in the heart engenders bravery; blood in the lower body indicates timidity. According to humoral theory, blood is naturally hot and moist (Galen *De Causis Morborum* 7.21–2), and blood is the only humor that tends naturally towards balance, whereas the other humors tend towards pathological imbalance (Galen *De Facultatibus Naturalibus* 2.117).[40]

Roman refinements

For Vitruvius, who describes the best structures according to environment, architecture (like medicine) must be adapted to climate and topography. Buildings in colder regions should be entirely roofed and face south, those in warmers areas should face north. In such a way, the builder can restore a balance of elements, thereby imposing harmony between nature and architecture (*De Arch.* 6.1.2). This sensible (and rational) philosophy of architecture is rooted in the well-established Greek ethno-climatological theories that we have explored above.

Like the Hippocratic author, Vitruvius sees anatomy, physiology, and character as joined with habitat (6.1.3). Temperate (*mediocriter*) places are best, where well-balanced bodies can be maintained, reiterating Herodotean and Hippocratic climatological expression. The hot sun in torrid regions robs the body of moisture, as we have already seen in *Aer.*, whereas those who dwell in cold areas (like the Herodotean-Hippocratic Scythians) have an overabundance of bodily fluids which in turn generates people with deep voices and large physiques (especially among Gauls and Germans: see further Caesar *B Gall.* 1.39.1, 2.30.4, 4.1.9; Livy 38.17.3; Vell. Pat. 2.106.1; Mela 3.26; Collumela 3.8.2; Veg. *Mil.* 1.1). The combination of abundant moisture and cold accounts for the physical features of northern peoples: light complexion, straight red hair, blue eyes, and plentiful blood (*sanguine multo*). Tacitus employs a similar description of the German peoples, describing their eyes as fierce (*truces*), but foregoing comment on their quantity of blood (*Germ*. 4; see also *Agr.* 11.2, where these characteristics—red hair and large bodies—suggest the Germanic origin of the Caledonians; see also Hor. *Epod.* 16.7; Ov. *Ars Am.* 3.163; Martial 8.33.20; Juv. 13.164).[41] In contrast, the dehydrating effects of the sun in drier regions produces a diametric physiology, even with regard to the texture of the hair (6.1.4). Those peoples from torrid zones are short, dark in complexion, and have curly hair and black eyes.

Physically weak, southern peoples possess scant blood (*sanguine exiguo*) because of the assault of desiccating solar rays (*solis impetu*), in contradiction to Hippocratic *Aer.* where watery chill engenders Scythian weakness. Peoples from tropical environs are, however, constitutionally stronger. They are able to endure heat and fevers because their bodies are acclimatized to external heat, thus they can endure internal (bodily) heat. In contrast, northern peoples from frigid zones dwelling in icy conditions are less able to withstand internal heat, becoming weak from fevers. Sallust (*Iug.* 17.6) observes that disease rarely causes death among the Numidians whose territory abuts lands that are seldom visited because of the

harsh, hot desert climate (17.2). He does not make explicit the connection between the torrid environment and the constitutional fitness of its inhabitants.[42] Sallust does, however, employ this ethnographic digression to foreshadow the course of the war between Rome and Jugurtha the Numidian, and to underscore thematic threads: the intractable landscape nurtures the grit of its inhabitants. Sallust depicts Jugurtha as warlike (*bellicosus*: 20.2) and Adherbal as timid, peaceful, fearful, and unwarlike (*inbellis*)—a thematically charged antithesis deriving not from environment and culture, but from innate, unmalleable character. The ethno-climatologic theory seems to have been borne out in 232 CE, when Severus Alexander's forces, encamped near the Euphrates in northern Syria, fell ill, unable to endure the "thickness of the air." According to Herodian's contemporary account (6.6.2), the Illyrian troops, in particular, were accustomed to "moist, cold air."[43] The emperor and his surviving soldiers recuperated in Antioch where they found cooler air and better water (Hdn. 6.6.4).[44]

Vitruvius further develops the impact of climate by linking temperature to intelligence (6.1.9). In the sparse air of southern skies, the mind becomes sharp and quick. In contrast, in the thick and moist (chilly) air of northern skies, minds become confounded or stupefied.[45] Vitruvius implies that the condition is not congenital, but related to environment. On the analogy of serpents, for example, who move quickly in hot weather, but sluggishly in cold, the human mind is sharper in warm weather, more lethargic in cold.[46] Thus mental celerity is seen as analogous with physical strength. This relationship between intelligence and temperature is causal, but the trait is meteorologically malleable.

Unlike the Hippocratic author of *Aer.*, Vitruvius does not consider effeminacy an innate characteristic of peoples with excessive moisture. Here the Roman understanding veers from Aristotelianism and humoral theory, where cold and wet signify feminine characteristics. On the contrary, Vitruvius' understanding of the connection between climate and courage (or cowardice) hinges on blood strictly as the vital principal. And here we see the fullest and most direct expression of a combined theory of climate and valor. According to Vitruvius, those dwelling in hot locales "fear to resist the sword" because of the thinness of their blood (*sanguinis exiguitatem*), yet the inhabitants of rugged, cold regions "stand against the sword without fear" because of their abundance of blood (*sanguinis abundantia*). It is one's innate *quantity* of blood that determines courage or cowardice, and this quantity is preordained by habitat in accordance with a medical theory of balance. Blood is warming. Those born in arctic lands need more blood to regulate their body temperatures in order to balance the harshness of their environment and to counteract the chilling consequences of their surroundings. Those inhabiting tropical areas require less blood to regulate body temperature because they are already heated by the sun. Bodily heat (blood) is counterbalanced by atmospheric temperature.

The pragmatic statesman Julius Caesar might have agreed with Vitruvius' theory of climate and valor. There was, however, little room for Greek theory in his missives to supporters—the "common" people—back home, and Caesar's style is noted for stunning artistic clarity, which in itself elicited Roman ideals of austerity, simplicity, and sobriety.[47] For Caesar, the *Commentarii de Bello Gallico* afforded an opportunity to glorify Rome and laud traditional Roman virtues. His Gallic campaigns enabled him to impose the ultimate (and abiding) retribution on a long-reviled enemy (Caesar *BGall.* 1.30.2; see Livy 6.1.11; Tac. *Germ*. 37). Furthermore, ethnography had become genre, and Caesar's reliance on source material, especially Poseidonius, despite his attestations of autopsy for book 6, steeps him within the tradition. Selection and presentation of ethnographic material varies little from the model established by Herodotus wherein in the dominant culture is exalted, while 'barbarians' are marginalized as the 'other,' either noble or crude.[48] On the other hand, Caesar's literary treatment is nuanced. He assimilates the Gauls to Roman standards, thus justifying their

successes against him in books 6 and 7, while also laying the groundwork for Roman acceptance of his desire to include the Gauls into the expanded senate later in his dictatorship.

To Caesar, who eschewed comment on climatological determinism, civilization corrupts while constant warfare (and military discipline) engenders courage, strength, and valor (*virtus*) (see Tac. *Germ*. 36). The Gauls, in fact, were once braver than the Germans, but are no longer. Proximity to Rome and the enervating effects of imported luxury items—which erode discipline (*B Gall.* 6.24) when "diverted from their traditional and legitimate use"—have together softened the Gauls.[49] Caesar's Belgae are the bravest of the Gauls both for their isolation from the abasing influences of the city, and for their propinquity to the Germans across the Rhine with whom they are continually at war (1.1.1). Those Germans who expel neighbors from their borders are praised for bravery (*B Gall.* 6.23). Similarly lauded are Tacitus' Langobardi (*Germ.* 40) and Marcomani (*Germ.* 42) who repel neighbors from their borders with military attacks (*Germ.* 12, where disgrace and harsh punishments come to cowards and those who refuse to fight: *ignavos et imbelles*). Permanent architecture, a sign of luxury in the harsh German climate, is discouraged for its vitiating effects—architecture weakens the body by allowing the Germans to avoid extremes in temperature (*B Gall.* 6.22). The Suebi, we read, are the most warlike of the Germans (4.1), perhaps because of their lifestyle of perpetual warfare—each man takes his turn engaging in agriculture and serving "under arms" in alternate years. But Caesar explicitly attributes Suebian success to consistent custom or training, which he sees as different from the Roman regard for duty and discipline that was lacking among the Suebi.

Caesar's interest was not in the natural world for its own sake, but only insofar as it impinged upon his tactics. Climate, weather, and topography are noted strictly as they affect strategy, the course of a march, the execution of a battle plan, or as Roman ingenuity is proven by overcoming topography (as with the bridging of the Rhine: *B Gall.* 4.16–17). For example, storms influenced Caesar's tactics against the Veneti (3.12–13), prevented his fleet from making a permanent landing on Britain (*B Gall.* 4.28–9), and thwarted his campaigns against the Meldi (5.5, 10). Several continuous days of bad weather kept Caesar's men in camp and prevented the enemy from attacking (4.34), but another storm provided an ideal opportunity for attacking Avaricum (7.27). Not even in his German ecphrasis, which includes the geographic extent and strange feral residents of the Hercynian forest, does Caesar explicitly discuss terrain or climate (6.21–8). Nonetheless, the human residents of this forest are renowned for their military glory, which derives not from the landscape but from their austerity and *virtus* (virtue: 6.24).[50] As Tacitus later reports (*Germ*. 6.2), lacking in adornment and aesthetic appeal, moreover, are German weaponry and horses.[51] Lifestyle and chastity, not the physical environment, make the Germans taller, stronger, and more virile (*B Gall.* 6.21).

Tacitus' interest, like Caesar's, is similarly in the human qualities of the land, and he is quick to point out endemic sources of wealth (and, thus, corruption: *Agr.* 12; *Germ.* 5.2). Like our Hippocratic author, Tacitus notes some variety in German topography, yet he curtly dismisses that variation: "Germany is bristling with forests and disgusting with swamps" (*Germ*. 5.1; see also Hor. *Carm.* 4.5.26; Prop. 4.6.77; Mela 3.29). The land is harsh, unattractive, and raw (*Germ*. 2). The British climate is similarly wet, disagreeable, and miserable (*Agr.* 12). Unlike Caesar, Tacitus makes particular note of climate: Germany is rather wet on the Gallic side, rather windy on the side facing Noricum and Pannonia. Despite Hippocratic vitiations in embryonic development, Tacitus assumes that the people lack variety, not necessarily because of the terrain and climate, but rather because of the purity of their bloodline—they have not been "contaminated" by intermarriage (cp. Livy's Gallo-Graeci: 38.17.10, see below). Architecture aside (above, *B Gall.* 6.22), Tacitus'

Germans can scarcely endure thirst or heat. And their bodies are weakened by this intolerance of heat (*Hist.* 2.93.1; see Livy 10.28.4), like the moist Hippocratic Scythians. Because of their harsh landscape, nonetheless, they are capable of withstanding cold and hunger. We compare Livy who also describes the Gauls as a people accustomed to cold and damp (5.48.3; see 34.47.5, 38.17.7), and, like Vitruvius' cold-weather peoples, they were utterly unable to endure "suffocating heat" and feverish disease.

Nonetheless, Tacitus generalizes about character, suggesting that the Germans are, at least, strong, if only for making attacks (*Germ.* 4.2; see Livy 5.44.4, 7.12.11; Frontinus, *Str.* 2.1.8), but they lack the discipline for labor, including military work (*operum*),[52] a moral failing.[53] Nor can the Germans even convene in an orderly and disciplined fashion when called to assembly (*Germ.* 11). Tacitus' Batavi, are especially noted for their bravery (*Germ.* 29; see also 31), but we do not learn what accounts for this excellent Batavian *virtus.* Inhabiting a territory less marshy and presumably drier and perhaps also warmer, the Chatti, furthermore, are constitutionally stronger than other Germans, with well-knit limbs, threatening countenances and "greater mental vigor" (30). Thus the people reflect the landscape: the hills "endure" (*durant*), their bodies are "rather hardened" (*duriora*). Although Tacitus does not make the link explicit, no doubt it was with deliberation that he selected words with the same stem and root-meaning (*dur*: hard). Tacitus here may allude to Livy 38.17, cited above, who similarly describes the Gauls as once, but no longer, "hardened" (*duratos*). Furthermore, Tacitus' Chattian hills open out or become thin (*rarescunt*), the land is drier, and in this environment of reduced moisture, the Chatti exhibit exceptional judgment and shrewdness. We tenuously suggest that Tacitus may have ethno-climatological theory in mind as an underlying assumption. But in Tacitus, as in Caesar, the connection between character and environ is ambivalent. For Tacitus, as for Caesar, bravery and cowardice are less explicitly issues of ethno-geography than of the pernicious results of urbanity.

For Livy, however, environmental determinism proves a powerful thematic trope. About to engage in pitched battle with Gallic mercenaries in Galatia (189 BCE), in his pre-battle rally to his troops, Cn. Manlius notes that in general it is the Gauls who have the greatest reputation as soldiers. But Manlius also observes that those Gauls whom his Roman troops will soon face in battle are impure (*degeneres*) and mixed (*mixti*). They are no longer the brave and brutal peoples who attacked Rome in 390/387 BCE, but instead they are the compromised Gallo-Graeci ("Greekish-Gauls"), who have been removed from their native environment. It is the environment—soil and air not so much as seed—that better preserves the natural qualities of men, livestock, and crops (38.17.10). Men transplanted into inferior locales acquire the degenerate characteristics of the alien environment (38.17.13). Livy's mercenary Spartans have lost their renowned discipline, and the Gauls are in fact no longer Gauls but Phrygians "weighed down with Gallic weapons," as if merely pretending to be Gauls in a desperate game of "dress-up." The tone, language, and thematic arc are Herodotean: environment can corrupt or embolden. Manlius assures his men that the massed mercenaries lack courage, discipline, and military efficacy. In the upcoming battle, Manlius attests, there will not be too much fighting. On the contrary, the commander fears that there will be too little glory (38.17.14). Like Tacitus' Chatti, these Gauls became hardened (*duratos*) by misfortune and war until they were received in a land rich with fat fields and very soft skies (*mitissimo caelo*) which obviated their natural spirit. Recalling Cyrus' soft men from soft places (*ek tōn malakōn chōrōn malakous gignesthai*, Hdt. 9.121.3), Manlius closes with a warning to his troops to leave this pleasant, effeminizing land as soon as possible (38.17.18) lest the allures of Asia extinguish the liveliness of the minds of these "men of Mars."

Climate and Roman (era) medical writers: Celsus and Galen

Climate, of course, figures into the discussion of health and disease in most medical writers. Celsus (2.1), for example, examines at length the interstices of climate and health: certain diseases are more prevalent at certain times of year, in particular types of weather, at defined times of life. Climate and season especially affect the ill (*praef.* 71), and a change of climate can be therapeutic (3.22.8, 4.32.1); some remedies are more effective at specific times of the year (1.3.19); soil, climate, and habitat affect the quality of nutriments, which in turn affects health (2.18.8; see also 3.4.6). Although Celsus pleads strongly in favor of observation and treatment as the path to successful therapy (*praef.* 36–9), his arguments on the connections between health and season derive from Greek medical theory: the healthier seasons are those wherein there is the least flux, when there is the least variation in temperature, and when mixtures are in balance. Spring, hence, is the most salubrious; autumn, with its ever-changing weather, is the least healthy; and pre-existing ailments can be mitigated under balanced, unvarying, temperate weather (2.4). But here ends the thematic link. In Celsus, contrary to Aristotelian theory, the (cold) north wind is bracing, yielding the healthy more "mobile and brisk" (2.1.10, instead of torpid), while the (warm) south wind induces lethargy and renders the senses blunt (2.1.11, instead of acute). Yet, the juncture between climate and character, between weather and behavior, is not emphasized. Celsus' *de Materia Medica* proceeds with a prosaic catalogue of remedies and treatments for a variety of medical concerns.

Theory guided therapy, but many medical texts were intended primarily as practical compendia—what to do for a fever, for a broken bone, for a toothache, as in Celsus and the medical books of Pliny. Soranus also seems little interested in climate. Yet in Galen, we see again Greek theoretical medicine. For Galen, philosophy and medicine were linked, and the soul could be understood in accord with Aristotelianism and its later Stoic developments.[54] In Galen, we also find comment on the nature of virtue and how virtues can be cultivated, e.g. only when natural aptitude for virtue is juxtaposed with the right upbringing (*Avoiding Distress* 57). Courage exists only when excellent education accompanies the proper disposition of character.[55]

Medicine and the Roman army

The Romans were pragmatic and, as we have seen, more interested in outcome than in theory. Cato's *De Agricultura* was intended as a practical guide for the *pater familias* in managing an estate, and it covered all manner of topics, from selecting a farm site, to planting, to slave management, to chants for treating dislocated limbs (*Agr.* 160). Pliny famously declares his *Naturalis Historiae* a collection of "twenty thousand matters worthy of attention" (*XX rerum dignarum cura*: *praef.* 17—matters that are interesting, at least, if not entirely practical from a jaded modern perspective). Celsus, we have already seen, privileged experience over theory, and the skeptical Scribonius Largus reacted scathingly to black magic, "superstition," and treatments that were not grounded in empiricism or reason.[56]

Several renowned medical writers served in the Roman army, where acting physicians observed the gamut of the human medical condition, and where they could learn far more about internal organs than most practicing civilian doctors (Celsus *praef.* 43). Scribonius Largus was on Claudius' staff—traveling with the emperor's household's troops—during the British invasion in 43 CE (59.60), perhaps as an official army doctor or as private physician to a high-ranking officer.[57] The pharmacological writer Pedanius Dioscorides of Anazarba wrote of his "soldier's life" (*praef.* 4).[58] The pharmacological author and historian Statilius Crito saw action on the Danube with his patron, the emperor Trajan (*FGrHist* 2b.200).[59] And useful

contributions and discoveries of army doctors were recorded in medical compilations: Galen recommends the headache cure of the army doctor Antigonus and the eye-salve of Axius, the oculist to the *classis Britannica* (*De Comp. Med.* 2.13 [12.557K]). The anti-scorbutic properties of *radix britannica* were likely learned by Germanicus' army doctors from local Frisians (Plin. *HN* 25.20–21).[60] Celsus' efficacious *barbarum* plaster for flesh wounds was also a campaign discovery (5.19.1b, 26.21–4).

The evidence for army medicine in the field is largely archeological. By 14 CE, the hospital (*valetudinarium*) became a standard feature of permanent legionary camps, with careful attention paid to lighting and water supply. Non-citizen auxiliary hospitals tended to be built on a smaller scale (if at all). These constructions usually included facilities for kitchens, recovery wards, operating arenas, and gardens where medicinal herbs might be grown.[61] We have scant information regarding who was treated in army hospitals, why, and by what means—carefully kept records have been lost to the exigencies of time. But an extant duty roster from Vindolanda reports thirty-one men as unfit for duty (through illness, injuries, eye problems—not all inflicted in battle).[62] Papyri from Dura-Europos ambiguously designate men on medical leave ("he remained ill," *aeger remansit*: P. Dura 95) or otherwise unfit for service ("unhealthy," *non sanus*: P. Dura 102).[63] There are reports of food poisoning[64] and even prosthetic limbs.[65]

Much concern was given to the health of the Roman troops. Drawing from the Hippocratic symbiosis of health and climate, Vegetius addresses the topic at length (*Mil.* 1.22). Recommending daily exercise and suitable food, Vegetius advises on when to march (not in the heat of the sun, nor in the frost and cold) and where to strike camp (in temperate places, neither marshy nor arid, with sufficient water and shade). Archeology bears out the latter, as campsites were diligently chosen and typically "avoided the unsalutary dangers mentioned by Vegetius."[66] Permanent camps were outfitted with sanitation systems, continuously flushed latrines (in permanent forts), bath houses, spas for convalescence, and even permanent drill halls where soldiers could train during inclement weather.[67] The medical staff attached to a legion would have included *seplasarii* who oversaw medical ointments, *marsi* responsible for treating poisonous bites,[68] *vigiles* attending to the convalescent, *librarii* to keep accounts, and *veterinarii* and *pecuarii* for the horses and livestock.[69] In addition, highly trained *medici*, serving either under short contracts or permanent commissions, often specialized in surgery (*medici chiurgi*), internal medicine (*medici clinici*), or eye complaints (*medici ocularii*: n.b. Herodotus on Egyptian *ocularii* [2.84, 3.1.1]). Trajan's column shows first aid stations where bearded (auxiliary) *medici* attend to the wounded with rolls of bandages.[70] Trajan himself reputedly tore his own cloak into strips to provide bandages for the wounded (Dio 68.8.2). Galen, furthermore, asserts that most soldiers knew how to staunch blood-flow from severed veins and arteries (*De Atra Bile* [5.160K]), and rudimentary training in first aid was widespread, at least among soldiers (Tac. *Hist.* 2.45). Celsus' procedures for removing missiles from the body were extensive, graphic, unequivocal, and devoid of theory (7.5.1–5). Six centuries later, Paul of Aigina (*fl.* 630–70 CE; 6.87) repeated Celsus' wound therapies, thus endorsing their efficacy.[71] In addition to missile removal, the army doctor had to be proficient at treating various types of trauma, including flesh wounds, head trauma, bone injuries, and complications such as hemorrhaging and inflammation (which could lead to death: Celsus 5.26.21–4).[72]

Vegetius' Roman army

Needless to say, like Celsus, the army doctor would have been more interested in treatment and recovery than in climatological theory. Nonetheless, climatological assumptions persisted.

Strabo famously attributes the rise of Rome to her medial and temperate, yet varied, climate (6.4.1; see also Plin. *HN* 3.41). Yet he, like Aristotle, also devalues the influence of climate on character: character traits may be connected to climate; they are not, however, adamantine. We see here Aristotle's long reach. *Virtus* can be nurtured (e.g. Seneca *Ep.* 37; *NQ* 4a *praef.* 15). Strabo observes that many peoples—savage by nature because of their rocky, mountainous, harborless, cold, or otherwise harsh terrain—learned "to live politically" under Roman authority (2.5.26). In Strabo, climate explains character but its effects are pliant. It is the Romans, according to Pliny, who exhibit the greatest *virtus* (7.130, 33.9). Yet Pliny also abstains from attributing this excellence to environment. The Chatramotitas of hot (but remote) Arabia Felix were "distinguished in war" (6.161), in contrast to the expectations of environmental determinism established by Herodotus and *Aer*.[73] For Roman administrators, climate and valor have been decoupled.

It is, therefore, a little surprising to find the Herodotean-Hippocratic theory of climate and courage expressed nearly a millennium later in the late imperial précis of Roman military science, the *de Re Militaris* of Publius Flavius Vegetius Renatus. According to Vegetius, recruits must be carefully examined to meet minimum requirements of height, age, health, and morality (*Mil.* 1.3–7; see also Caesar *B Gall.* 1.39, 2.30; Tac. *Germ.* 20). Rural recruits are consistently more reliable, both physically and morally (Veg. 1.4; see also Cato, *RR praef.*),[74] in accord with the ancient ideal of the Roman citizen-farmer (e.g. Cincinnatus: Livy 3.26). Vegetius also includes a particularly intriguing tidbit concerning which regions produced the best soldiers (*Mil.* 1.2): He tells us "climate exerts an enormous influence on the strength of minds and bodies." According to Vegetius, the most learned men (e.g. Aristotle, Hippocrates, Vitruvius) agree that people from warmer environments may have more intelligence (*amplius sapere*) but their paucity of blood (*minus sanguinis, exiguum sanguinem*)—and their awareness of this anatomical fact—renders them afraid of being wounded and, consequently, they are poor soldiers.[75] On the other hand, men from colder regions have an overabundance of blood (*largo sanguine*) and are, therefore, eager to fight (like Tacitus' Germans, who were strong if only for attacking), but they lack intelligence, which is not conducive to camp discipline. Vegetius encourages levying troops from temperate environs. Such recruits have sufficient blood (*copia sanguinis*), so as not to fear being wounded, and sufficient intelligence—hearkening back, loosely, to Aristotle who connected intelligence to the texture of the blood. The intelligence of the troops is necessary for camp discipline and can even be an advantage in battle, where a good officer should exhibit (restrained) initiative.

Following Herodotus, the Hippocratics, Poseidonius, and Strabo, Vegetius subscribes to Greek environmental determinism: the best climate is moderate, temperate, with little change—where mixtures are in balance and seasonal variation is minimal. Such a climate produces the best political systems, the best cultural systems, the best men, and the best soldiers. Vegetius' prejudices stem from these long-established climatological theories, but do they reflect the realities of service in the Roman army?

Let us quickly consider the ethnic origins of Roman soldiers, particularly of allied auxiliary troops, and whether these ethnic prejudices guided Roman recruiting efforts. Information on the social origins of Roman soldiers is limited, and both literary and epigraphic evidence tend to obscure sociological issues.[76] Auxiliary cohorts were not necessarily refreshed with recruits from the colonies or provinces of their origins.[77] The briefest survey of highly specialized forces, however, may elucidate.

The Roman army had long employed specialized allied troops, a common practice already by 217 BCE when a thousand Syracusan archers and slingers fought for Rome against Hannibal. These troops were "well adapted (*aptam*) against Moors and Baliares and other races

who fought with missiles" (Livy 22.37.8). Romans took full advantage of the talents of their allies, allowing them to fight in native dress, with indigenous weapons, according to local techniques that Roman troops may have lacked, as when Syracusan archers were matched against North African archers. Spaniards were at first considered too wild and unpredictable to make good soldiers, but Sertorius' leadership and discipline proved this assumption false (Sallust, *Hist.* 2.34).[78] Caesar soon recruited Gallic horsemen, many of whom fought with him against Pompey (e.g. *B Gall.* 1.15; *B Civ*. 1.51). Comprising Caesar's personal bodyguard (*B Gall.* 7.13.1), the Germans, especially the Batavi, would soon supply the *Custodes*, the imperial bodyguard commissioned under Augustus (Suet. *Cai.* 43.1, 58.3; Tac. *An.* 15.58). Because of their loyalty to Nero, the *Custodes* were unceremoniously disbanded by the stingy Galba (Suet. *Galb.* 12). The Batavi were later employed to seed a new imperial bodyguard, the *Equites Singulares Augusti*. Trajan found the Numidian cavalry useful against the Dacians, just as Numidian light cavalry had earlier proved formidable at Cannae in 216 BCE under Hannibal (Livy 22.13.10).[79] Hannibal's adversary Scipio Africanus eventually gained their support, helping to turn the tide of war.[80] The auxiliary system was slowly standardized during the first century CE, as units were reorganized and eventually given regular status.[81] Recruits were levied annually, perhaps according to an algorithm in conjunction with census results and tax obligations, but not systematically across tribes (the Batavi who paid no taxes were reserved exclusively for allied military service: Tac. *Germ*. 29).[82] Renowned were archers from Crete, and light cavalry and camel-mounted troops from Syria (*dromedarii*).[83] Dalmatian cavalry were deployed in the fourth century CE throughout the empire (*Notitia Dignitatum*), and the lightly armed *Equites Cataphractarii*, instituted on the Parthian paradigm, countervailed Parthian, Pannonian, and Sarmatian battle tactics.[84] Also notable are the thirty-two units of auxiliary archers (*sagittarii*) hailing from Crete (which supplied mercenary archers from the 80s BCE onward), Syria, Thrace, and Anatolia, and, eventually, the Balearic slingers represented on Trajan's column.[85] Finally, reconnaissance troops (*exploratores*) were levied in Germany, Sarmatia, and Britain.[86]

We see that Roman auxiliary troops were raised from a wide geographical and climactic expanse, "from a circle of accepted allies,"[87] that included the hot provinces of Syria, Crete, Numidia, and the Balearics, the cold and wet environs of Germany and Britain, temperate Syracuse, and even Parthia, Herodotus' "soft places" (*malakoi chōroi*).

As a point of fact, Roman military allies were selected not for adherence to a Hippocratic ideal of environmental determinism but rather for political expediency (e.g. the famed loyalty of the Batavi) and exceptional combat talents. Whereas it is a natural prejudice to consider one's own citizens the most courageous, as indeed the Romans believed, practice and theory were decoupled. This decoupling of theory and practice likely stems from a combination of Roman medical approaches combined with a deep-seated Roman understanding of their ethical values. Roman medicine was characterized by multiple approaches, the most dominant of which eschewed humoralism in favor of a more mechanistic model of the body. Thus the tenets of humoral balance failed to hold the same cachet among the Romans as among the Hellenistic Greeks, and the delicate harmony between organism and environment did not persuade. Furthermore, the Romans celebrated their tradition of self-sufficiency, austerity, and *virtus*, ideals that are at odds with environmental theories for courage that place (untempered) *virtus* in Germany and Gaul. While recruits were selected for their political and medical suitability, as well as their availability, nonetheless, climatological determinism endured in literary contexts. Authors wrote themselves into this ancient tradition as a means of validating and authenticating their own work. Vegetius' assertion that cold climates produce more courageous soldiers is less an affirmation of ethno-climatological theory than

it is an avowal of his own participation in this long-esteemed heritage. Vegetius thus links himself intimately with Vitruvius, Aristotle, Herodotus, and Hippocrates, whose luster even Galen admired. Vegetius can thereby elevate his work from a mere handbook on the Roman army into a treatise that takes its place within the most exalted ranks of Greek and Roman philosophical institutions.[88]

Notes

1 See also Hippoc. *Aer.* 23–4 on the relationship of pleasant climate to intelligence and cowardice.
2 Thomas 2000, 38.
3 Chiasson 2001, 57–8, 64.
4 Lateiner 1986, 16; Hartog 1988, 23–30; Lateiner 1989, 155ff; Erbse 1992, 160–66; Thomas 2000, 64.
5 West 1988.
6 A popular sport, the hare-hunt is widely represented on Scythian artwork. Mounted hunters at full gallop try to kill a hare with a lance or short spear, to increase the challenge: Hartog 1988; Rolle 1989, 98. Herodotus may be describing an early version of the brutal game of Buzkashi, still popular in the central Asian Steppes.
7 See Hartog 1988, 91.
8 See also Herodotus 1.73.5, where the Scythians dress a human victim like animal prey.
9 At Celtic Iron Age sites (especially in Thrace), "killed objects" (e.g. deliberately damaged weapons) are commonly attested in burials. Warriors' limbs were also broken before burial, and children are found buried with toys, as well as suits of clothes several sizes too large, as if they might grow into them in the afterlife. See Pleiner and Scott 1993; Kurz 1995; Bradley 1998.
10 Among the Greek verbs for scalping is *aposkuthizō* ("after the Scythian practice": Euripides, *Trojan Women* 1026; Athenaeus, *Deipnosophistae* 12.524ff). Scalping and headhunting were also practiced by the Tauri of the Crimean mountains (4.103.3), and the Celts and Germans. Scalps are rendered in Scythian art: a belt from the cemetery at Tli shows a mounted warrior with head suspended from reins; from a kurgan at Kurdzhips, a gold cap shows a Scythian warrior carrying a head to another Scythian. The remains of a workshop for converting skulls into drinking bowls are evident at Belsk on the Vorskla River. See Minns 1913, 223 figure 126; Rolle 1989, 81–2, figures 58–9; Wheeler 2007, 754.
11 See also Ash 2010.
12 Thomas' point that Herodotus here exaggerates is well taken (2000, 66). Many Scythians practiced agriculture, by Herodotus' own admission (e.g. 4.17, 74.2 [on cultivated cannabis]; Rubinson 1975).
13 Thomas 2000, 66.
14 See also Harrell 2003, 78–9.
15 A complex and gendered issue in Herodotus, courage (*andreia*) is associated with strength in war. Hardly a natural or exclusive result of ethnicity, *andreia* is noted among non-Greeks as well as Greeks. Nor is lack of *andreia* necessarily proof of racial inferiority (Tulpin 1999; Thomas 2000, 110–17; Harrell 2003, 79).
16 Harrell 2003, 86.
17 Thomas 2000, 31.
18 Chiasson (2001, 63) sees Cyrus' declaration as referring only to topography. Others (Chiasson 2001, note 66) concede that Cyrus' *malakōn khōrōn* may refer also to climate. The adjective usually refers to a physical texture or character trait. Similar observations are made about plants by Theophrastus, who did not necessarily espouse a theory of environmental determinism: dry trees prefer dry countries (*Caus. Plant*. 3.6.8); hot plants come from hot countries (*Caus. Plant.* 1.21.5–6). Theophrastus counters the speculation of the earlier botanist Menestor (*fl.* 460–440 BCE) that hot plants thrive in cold countries. On Menestor's theory of environmental determinism, nature sought to counterpoise properties, thus equalizing them. See also Hughes 1985, 298–9.
19 Thomas 2000, 28; Chiasson 2001, 45–7. With access to sources now lost, both Herodotus and the Hippocratic author drew from a rich corpus of early ethnographic and medical literature, including Hecataeus, Democritus, and Hellanicus: Heinimann 1945, 177–80; Lloyd 1991, 194–223; Jouanna 1996, 54–71. For further discussion on *Aer.* and human-environment connections in Greek thought, see Kennedy, this volume.
20 Hartog 1988, 356–9; see also Lloyd 1975.

21 Understanding climate and the effects of environment and seasons on the body (even at different times of the year) is essential to treating illness in Hippocratic and later authors: e.g. *Regimen* 1.2; Celsus 1.3; Plin. *HN* 7.17.
22 Herodotus employs technical Hippocratic vocabulary when discussing the Libyan practice of cauterizing the veins on the heads of children in order to prevent phlegm from leaking out of the head: 4.187.2–3. See Althoff 1993; Thomas 2000, 36–42.
23 Lonie 1981, 263. See also Herodotus 3.125.4, where Polycrates' daughter dreams of her father's death by hanging. His body loses its *ikmas*. In *Aer.* 8, the sun can draw out moisture's "thinnest and lightest portion."
24 See also Chiasson 2001, 34.
25 Dryness or cautery seems to be a condition of good health: above, note 21; Thomas 2000, 48. In a separate Hippocratic work—treating dietary requirements according to season, among other criteria—by a different author, the Libyans are hot and dry, inhabiting a land whose climate is little-changing, and thus the people who dwell there are stronger (*Regimen* 2.37), in contradiction with the theory espoused in *Aer.* The date (possibly late fifth century) of *Regimen in Health* and its integrity are disputed.
26 E.g. the military prowess (*makhimōtatoi*: *Aer.* 16) of those residents of Asia Minor who had not submitted to despotic rule, and the author's observation that custom can engender courage (*to de andreion*) even in those lacking it naturally. The Hippocratic author imposes his cultural bias onto his theory of environment, thereby introducing such contradictions: Backhaus 1976, 177–85; Jouanna 1981, 11–14; Tulpin 1999, 64–5; Thomas 2000, 86–97.
27 Chiasson 2001, 63.
28 Galen also addresses the role of climate (heat, cold, humidity or aridness) on embryonic development (*Nat. Fac.* 1.3, 1.6; Ergin 2008, 452).
29 Nisters 2000, 13.
30 Nisters 2000, 14, 69–70, 88–92. See also Pl. *Leg.* 747d5–e2, where the powers of the capacities of the soul—courage, meekness, intelligence, etc.—are affected by the proportions (or mixtures) of winds, the sun's heat, waters, and nourishment from the earth. Thus character is molded by a delicate tension of elements of both environment and soul. See further Galen *Capacities of the Soul* 9.
31 Nisters 2000, 88–102, 106.
32 Rogers 1994, 304; Sanford 2010, 434.
33 Such attitudes endured into the Muslim world, where Ibn Khaldun (1332–1406) attributed greater joy and levity among those who dwell in hot places near the sea, because there the sun's rays are more intensely reflected (see Ergin 2008, 451).
34 Politics and environment were viewed as symbiotic, and climate and topography were thought to shape political institutions: Pl. *Resp.* 435d–e; Thuc. 1.2; Arist. *Pol.* 7.11; Eratosthenes (Strabo 1.4.9); Cic. *Resp.* 2.3; Strabo 1.1.18; Plin. *HN* 2.80. See Ergin 2008, 453–6, 458–60.
35 See Goldman, this volume.
36 See van der Eijk 2005, 119–35.
37 See van der Eijk 2005, 225.
38 Singer 2013, 121, 131; see also Galen *Character Traits.*
39 The Hippocratic author is here inconsistent with *Aer*, where the varied topography can work against a moist climate, as can technological interference—cauterization—to turn the timid into the courageous.
40 Hankinson 2008, 219; see also Aristotle *On Respiration* 479b17–80b30 for respiration as the mechanism whereby the heart and blood are cooled. For humoral theory, where health is maintained through the proper harmony of the humors (the list of which was not fixed: Nutton 2013, 79) see especially Hippocratic *Ancient Medicine* 18–19, 24; *Nature of Man* 4; *Regimen* 1.12–24; Celsus *praef.* 14. In diagnosing and treating disease, most Hippocratic authors gave privilege of place to phlegm and bile, the two most visible fluids that were graphically associated with illness: see also Craik 1998, 14–16; Jouanna 1999, 317.
41 For excess blood and the damaging results (e.g. disease) of blood-transfusions in people whose quantity of blood is sufficient: Celsus *praef.* 60–61, citing Erasistratus.
42 See Büchner 1953, 157; Roller 2003, 91–2; Comber and Balmaceda 2009, 203. See also Syme 1964, 152 who maligns the "usual devastating effects" of the "Greek eruditions and fancies" in Sallust's brief African digression.
43 Nonetheless, other troops perished from frostbite during the same campaign. Compare Xenophon's description of Alexander the Great's frostbitten troops: *Anab.* 4.5.12.

44 Nutton 2013, 25.
45 See Verg. *G.* 3.367–75, where the Scythian sky is thick with snow, and Scythian deer are nearly paralyzed from the cold.
46 This link between humidity/aridity and motion goes back to the Aristotelian *Problems* 1.24, finding meticulous expression in Theophrastus *De Ventis* 56. The excessively wet south wind induces weakness and lethargy. Our strength lies in the joints which grow slack under the humid south wind, as the sticky fluid therein becomes hardened, thus hindering the ability to stretch (or even to move: Ps.-Arist. [*Pr.*] 1.24; see further Hippoc. *Morb. Sacr.* 13). Pseudo-Aristotle's *Problemata* 1.24 distinguishes more carefully between the effects of hardened and loosened joints. Hardened joints prevent motion altogether, whereas moist, loosened joints impede exertion. Strength and flexibility are restored under the equalizing and evaporative effects of the north wind. Theophrastus is explicit: (dry, warm) north winds desiccate and harden, (cold, wet) south winds moisten and dissolve (*De Ventis* 58), thus explaining why workers are stronger and more vigorous under north winds. Theophrastus *Phys. op.* 25 (on cowardice: *deilia*) is pure caricature.
47 For Caesar's style: Schlichter 1936; Rambaud 1966.
48 Murphy 2004, 79–87; see also Rives 1999, 11–21. We have already noted the uncivilized 'barbarity' of the Scythians in Herodotus. In Homer, the Scythians represent the 'noble savages' who dwell in a far-northern Utopia together with the most just of all humans who engage in no violence (*Il.* 13.4–7). In Hesiod, the "mare-milking" Scythians have greater intelligence than capacity for speech (*Cat.* fragment 151, Merkelbach and West). Contrarily, in Aeschylus, the Scythians employ "savage-hearted iron" weapons in armed conflict (*Sept.* 727–30). See Chiasson 2001, 36–7.
49 Murphy 2004, 97–9; see also Pliny 9.105, 127; 11.35; Isager 1991, 223. See Tac. *Germ*. 5, 19.1. The noblest Germans of the far north live peacefully, free from greed and passion (*Germ.* 35).
50 See Dench 1995.
51 German horses were not even trained in military maneuvers. Caesar, in fact, mounted his German cavalry on "more suitable" non-German horses: *B Gall.* 7.65.5.
52 Anderson 1938, at *Germ.* 4.2.
53 Rives 1999, at *Germ.* 4.2.; see *Germ*. 14.3, 15.1, 26.3, 45.3.
54 Nutton 2013, 13–15. See also Galen *The best Doctor is also a Philosopher*. For Galen's treatment of the nature of the soul: i.e., *The Affections and Errors of the Soul, The Soul's Dependence on the Body*; Donini 1988, 67–72; Donini 2008 on discrepancies between Galen's understanding of the soul in *On the Doctrines of Hippocrates and Plato* and *The Faculties of the Soul Follow the Mixtures of the Body*.
55 For Galen (*Matters of Health* 6.39K), the soul ultimately derives from the mixture of certain parts of the body. Thus it can be expected that children with the best somatic dispositions will be "blameless" in character (Singer 2013, 121).
56 E.g. Scribonius Largus dismisses a bladder stone treatment compounded by a man specifically not wearing an iron ring (12) and an epilepsy cure that involved drinking blood from the skull of a dead gladiator (13): Nutton 2013, 176–7.
57 See Nutton 2013, 175; *CIL* 3.12116 for a governor's private physician.
58 Dioscorides was, perhaps, a practicing army doctor (Davies 1970, 88; Nutton 2013, 182), or he may have considered his occupation replete with hardship and discipline (Riddle 1985, 4; Scarborough in Beck 2005, xvi).
59 Scarborough 1985; see also Davies 1970, 88.
60 Davies 1970, 92.
61 At Neuss, medical staff were cultivating centaury ("a true panacea": Nutton, 2013, 181), henbane, St. John's Wort, plantain, and fenugreek: Davies 1970, 91. Most *pharmaka*, however, were imported: Knörzer 1970; Watermann 1974, 167–72; Nutton 2013, 182–3. The *Legio II Adiutrix*, stationed near Budapest, received duty-free wine "for the account of the hospital" (Davies 1970, 92–3). Horehound-flavored wine was imported to Carpow in Scotland in the early third century. An Egyptian papyrus also records a contract dated to 138 for "plain white blankets, six cubits by four, with finished hems," perhaps for the legionary hospital in Nicopolis (for the *Legio II Traiana)*: Davies 1970, 101; Jackson 1988, 34; Nutton 2013, 184.
62 Bowman and Thomas 1991.
63 Davies 1970, 101.
64 Youtie and Winter 1951, #468; Jackson 1988, 131; Davies 1970, 101.
65 Nutton 2013, 189; see Celsus 7.16 on amputating limbs.

66 Davies 1970, 85.
67 Davies 1970, 98.
68 This designation, *marsi*, evokes the ancient Italic peoples' renown for curing serpent bites with their bodies, like the Psylloi of North Africa: Plin. *NH* 7.14; Nutton 1985; see Hor. *Ep.* 17.30. See Jones-Lewis, this volume.
69 Davies 1970, 86–7.
70 Rossi 1971, 152 and spiral 6d.
71 Davies 1970, 89.
72 Davies 1970, 89; Salazar 2000, 9–38.
73 Pliny's complex, ambivalent account of the topography and peoples of Arabia ("a barren land with only two notable cities") was otherwise colored by the failure of Aelius Gallus' 26/25 BCE expedition (MacAdam 1989, 292–3, 314; see also Strabo 16.4.22–4).
74 See also Davies 1989, 3–30.
75 See also Weeda, this volume.
76 Alston 2007, 183.
77 For example, we do not know if the *Ala Indiana Gallorum*, raised in Gaul in 21 CE and named for Julius Indus, was refreshed with Gallic soldiers when it was transferred to Upper Germany (before Claudius: *CIL* XIII 6230), Cirencester (under Vespasian: *RIB* 108), or to Lower Germany (under Domitian: *CIL* XIII 8519). See Holder 1982, 108; Jarrett 1994, 40, #6.
78 Webster 1998, 141.
79 Rossi 1971, 104.
80 Dixon and Southern 1992, 21–2.
81 Webster 1998, 142.
82 Hassell 1970.
83 Holder 2003, 140.
84 Holder 2003, 133, 135.
85 Rossi 1971, 102; Goldsworthy 2003, 137 and spiral 10b; 11b.
86 Mattingly 2006, 223.
87 Webster 1998, 141.
88 With thanks to Duane W. Roller whose comments on an earlier draft of this chapter, as always, helped to improve both its content and focus.

Bibliography

Alston, Richard. 2007. "Warfare and the State: The Military and Politics." In *The Cambridge History of Greek and Roman Warfare*, edited by Philip Saban, Hans Van Wees, and Michael Whitby, 176–97. Cambridge: Cambridge University Press.

Althoff, Jochen. 1993. "Herodot und die griechische Medizin." In *Antike Naturwissenschaft und ihre Rezeption*, edited by K. Döring und Georg Wöhrle, 1–16. Bamberg: Collibri.

Anderson, J.G.C., ed. and comm. 1938 [1977]. *Tacitus: Germania*. Oxford: Oxford University Press [Bristol: Bristol Classical Press].

Ash, Rhiannon, 2010. "Rhoxolani Blues (Tacitus *Histories* 1.79): Virgil's Scythian *Ethnography* Revisited." In *Latin Historiography and Poetry in the Early Empire: Generic Interactions,* edited by John F. Miller and Anthony John Woodman, 141–54. *Mnemosyne*. Supplementum 321. Leiden: EJ Brill.

Backhaus, Wilhelm. 1976. "Der Hellenen-Barbaren-Gegensatz und die Hippokratische Schrift Περι ἀέρων ὑδάτων τόπων." *Historia* 25: 170–85.

Beck, Lily Y., tr. 2005. *Pedanius Dioscorides of Anarzarbus. De materia medica.* Hildesheim, Zürich, and New York: Olms-Weidmann. With an introduction by John Scarborough: xiii–xxi.

Bowman, A.K. and J.D. Thomas. 1991. "A Military Strength Report from Vindolanda." *Journal of Roman Studies* 81: 62–73.

Bradley Richard. 1998. *The Passage of Arms. An Archaeological Analysis of Prehistoric Hoard and Votive Deposits*. 2nd edn. Oxford: Oxford University Press.

Büchner, Karl. 1953. *Der Aufbau von Sallusts Bellum Jugurthinum*. Weisbaden: Franz Steiner.

Chiasson, Charles C. 2001. "*Scythian* Androgyny and Environmental Determinism in *Herodotus* and the Hippocratic Περι ἀέρων ὑδάτων τόπων." *Syllecta Classica*. 12: 33–73.

Comber, Michael and Catalina Balmaceda. 2009. *Sallust: The War Against Jugurtha*. Oxford: Aris and Phillips.
Coutant, Victor and Val Eichenlaub. 1975. *Theophrastus: De Ventis.* Notre Dame, IN: University of Notre Dame Press.
Craik, Elizabeth. 1998. *Hippocrates: Places in Man*. Oxford: Clarendon Press.
Davies, Roy W. 1970. "The Roman Military Medical Service." *Saalburg-Jahrbuch* 27: 84–104.
Dench, Emma. 1995. *From Barbarians to New Men: Greek, Roman and Modern Perspectives of Peoples of the Central Appenines.* Oxford: Oxford University Press.
Dixon, Karen R. and Pat Southern. 1992. *The Roman Cavalry*. London: Routledge.
Donini, Pierluigi. 1988. "Tipologia Degli Errori e Loro Correzione Secondo Galeno." In *Le Opere Psicologische di Galeno,* edited by P. Manuli and M. Vegetti, 65–116. Naples: Bibliopolis.
———. 2008. "Psychology." In *The Cambridge Companion to Galen*, edited by R.J. Hankinson, 184–209. Cambridge: Cambridge University Press.
Erbse, Hartmut. 1992. *Studien zum Verständnis Herodts.* Berlin: de Gruyter.
Ergin, Gürkan. 2008. "Geography-Human Relationships in Ancient Sources: Some Remarks on Geopolitics and Environmental Determinism." In *EUERGETES: Festschrift für Prof. Dr. Haluk Abbasoğluzum 65. Geburtstag*, edited by Yayına Hazırlayanlar, 449–62. Antalya: Suna-İnan Kıraç Akdeniz Medeniyetleri Araştırma Enstitüsü.
Goldsworthy, Adrian. 2003. *Complete Roman Army*. London: Thames and Hutton.
Hankinson, Robert J. 2008. "Philosophy of Nature." In *The Cambridge Companion to Galen*, edited by R.J. Hankinson, 210–41. Cambridge: Cambridge University Press.
Harrell, Sarah E. 2003. "Marvelous Andreia: Politics, Geography, and Ethnicity in Herodotus' Histories." In *Studies in Manliness and Courage in Classical Antiquity*, edited by Manfred Horstmanshoff, 77–94. Leiden: EJ Brill.
Hartog, François. 1988. *The Mirror of Herodotus: The Representation of the Other in the Writing of History.* Berkeley: University of California Press.
Hassall, M.W.C. 1970. "Batavians and the Roman Conquest of Britain." *Britannia* 1: 131–6.
Heinimann, F. 1945. *Nomos und Physis*. Basel: Reinhardt.
Holder, Paul A. 1982. *The Roman Army in Britain*. London: Batsford.
——. 2003. "Auxiliary Deployment in the Reign of Hadrian." *Bulletin of the Institute of Classical Studies* 46: 101–45.
Hughes, Donald J. 1985. "Theophrastus as Ecologist." *Environmental Review* 9: 296–306.
Isager, J.H. 1991. *The Elder Pliny's Chapters on the History of Art*. Odense: Odense University Press.
Jackson, Ralph. 1988. *Doctors and Diseases in the Roman Empire*. London: British Museum.
Jarrett, Michael G. 1994. "Non-Legionary Troops in Roman Britain: Part One, the Units." *Britannia* 25: 35–77.
Jouanna, J. 1981. "Les Causes de la défaite des Barbares chez Eschyle, Hérodote et Hippocrate." *Ktema* 6: 3–15.
——. 1996. *Hippocrate, Airs, Eaux, Lieux*. Paris: Les Belles Lettres.
——. 1999. *Hippocrates*. Baltimore, MD: Johns Hopkins University Press.
Knörzer, K-H. 1970. *Römerzeitliche Pflanzenfunde aus Neuss*. Berlin: Deutsches Archäologisches Institut.
Kurz, G. 1995. *Keltische Hort- und Gewässerfunde in Mitteleuropa. Deponierungen der Latènezeit*. Material hefte zur Archäologie in Baden-Württemberg 33. Stuttgart: Theiss.
Lateiner, Donald. 1986. "The Empirical Element in the Methods of Early Greek Medical Writers and Herodotus: A Shared Epistemological Response." *Antichthon* 20: 1–20.
——. 1989. *The Historical Method of Herodotus.* Toronto: University of Toronto Press.
Lloyd, Geoffrey E.R. 1975. "The Role of Medicine in the Development of Early Greek Science." *Lampas* 8: 327–33.
——. 1991. *Methods and Problems in Greek Science.* Cambridge: Cambridge University Press.
Lonie, Iain M. 1981. *The Hippocratic Treatises 'On Generation' 'On the Nature of the Child' 'Diseases IV'*. Berlin and New York: De Gruyter.
MacAdam, Henry Innes. 1989. "Strabo, Pliny the Elder and Ptolemy of Alexandria: Three Views of Ancient Arabia and Its Peoples." In *L'Arabie Préislamique et Son Environment Historique et Culturel. Actes du Colloque de Strasbourg, 24–27 juin 1987*, edited by Toufic Fahd, 289–320. Leiden: EJ Brill.
Mattingly, David. 2006. *An Imperial Possession: Britain in the Roman Empire*. London: Penguin.

Minns, Ellis H. 1913. *Scythians and Greeks: A Survey of Ancient History and Archaeology on the North Coast of the Euxine from the Danube to the Caucasus*. 2 volumes. Cambridge: Cambridge University Press.
Murphy, Trevor. 2004. *Pliny the Elder's Natural History: The Empire in the Encyclopedia*. Oxford: Oxford University Press.
Nisters, Thomas. 2000. *Aristotle on Courage*. *Studia Philosophica et Historica* 26. Bern; Frankfurt am Main: Lang.
Nutton, Vivian. 1985. "The Drug Trade in Antiquity." *Journal of the Royal Society of Medicine* 78: 138–143.
——. 2013. *Ancient Medicine.* 2nd edn. London: Routledge.
Pleiner, Radomir and Brian G. Scott. 1993. *The Celtic Sword.* Oxford: Oxford University Press.
Rambaud, Michel. 1966. *L'Art de la Déformation Historique dans les Commentaires de César*. Paris: Les Belles Lettres.
Riddle, John M. 1985. *Dioscorides: On Pharmacy and Medicine.* Austin: University of Texas Press.
Rives, James B. 1999. *Tacitus: Germania*. Oxford: Oxford University Press.
Rogers, Kelly. 1994. "Aristotle on the Motive of Courage." *The Southern Journal of Philosophy*. 32: 303–13.
Rolle, Renate. 1989. *The World of the Scythians*. Berkeley: University of California Press.
Roller, Duane W. 2003. *The World of Juba II and Kleopatra Selene: Royal Scholarship on Rome's African Frontier*. London: Routledge.
Rosen, Ralph M. 2003. "The 'Andreia' of the Hippocratic Physician and the Problem of Incurables." In *Studies in Manliness and Courage in Classical Antiquity,* edited by Manfred Horstmanshoff, 95–114. Leiden: EJ Brill.
Rossi, Lino. 1971. *Trajan's Column and the Dacian Wars*. Ithaca, NY: Cornell University Press.
Rubinson, Karen S. 1975. "Herodotus and the Scythians." *Expedition* 17: 16–20.
Salazar, C.F. 2000. *The Treatment of War Wounds In Graeco-Roman Antiquity*. Leiden: EJ Brill.
Sanford, Jonathan J. 2010. "Are You Man Enough?: Aristotle and Courage." *International Philosophical Quarterly* 50: 431–45.
Scarborough, John. 1985. "Criton, Physician to Trajan: Historian and Pharmacist." In *The Craft of the Ancient Historian: Essays in Honor of Chester G. Starr*, edited by J.W. Eadie and J. Ober, 387–405. Lanham, MD: University Press of America.
Schlichter, J. 1936. "The Development of Caesar's Narrative Style." *Classical Philology* 31: 212–24.
Singer, Peter N. 2013. *Galen: Psychological Writings*. Cambridge: Cambridge University Press.
Syme, Ronald. 1964. *Sallust.* Berkeley: University of California Press.
Thomas, Richard F. 1982. *Lands and Peoples in Roman Poetry: The Ethnographical Tradition.* Cambridge: Cambridge Philological Society.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science, and the Art of Persuasion.* Cambridge: Cambridge University Press.
Tulpin, Christopher. 1999. "Greek Racism? Observations on the Character and Limits of Greek Ethnic Prejudice." In *Ancient Greeks West and East*, edited by G. Tsetskhladze, 47–75. Leiden: EJ Brill.
Van der Eijk, Philip. 2005. *Medicine and Philosophy in Classical Antiquity: Doctors and Philosophers on Nature, Soul, Health and Disease*. Cambridge: Cambridge University Press.
Watermann, Rembert. 1974. *Medizinisches und Hygienisches aus Germania Inferior*. Neuss: Geschichte für Buchdruckerei.
Webster, Graham. 1998. *The Roman Imperial Army of the 1st and 2nd Centuries AD*. 3rd edn. Norman: University of Oklahoma Press.
West, Stephanie. 1988. "The Scythian Ultimatum (Herodotus IV, 131, 132)." *Journal of Hellenic Studies* 108: 207–11.
Wheeler, Everett L. 2007. "Herodotus and the Black Sea Region." In *The Landmark Herodotus*, edited by Robert B. Strassler, 748–55. New York: Anchor Books.
Youtie, Herbert Chayyim and John Garrett Winter. 1951. *Michigan Papyri*, vol. 8. Ann Arbor: University of Michigan Press.

15

NATIONALITY, RELIGIOUS BELIEF, GEOGRAPHICAL IDENTITY, AND SOCIOPOLITICAL AWARENESS IN ABRAHAM IBN EZRA'S ASTROLOGICAL THOUGHT

Shlomo Sela

Abraham Ibn Ezra (c. 1089–c. 1161) was born in Muslim Spain, where he received his Jewish and scientific education within the orbit of Arabic culture and language. After leaving his homeland at the age of 50, he began an itinerant life that took him through Italy, France, and England. During these years he wrote prolifically on a wide variety of subjects, almost exclusively in Hebrew.[1] Although Ibn Ezra owes his reputation to his outstanding biblical commentaries, he also wrote religious and secular poetry, religious-theological and grammatical monographs, and a large corpus of scientific treatises on mathematics, astronomy, scientific instruments, the Jewish calendar, and, especially, astrology.[2] He incorporated a significant amount of astrology into his biblical commentaries, thereby promoting the smooth absorption of that science into Jewish culture.[3] He also produced the first comprehensive set of astrological texts in Hebrew that address the main systems of Arabic astrology and provided Hebrew readers with access to that body of knowledge.[4] Shortly after Ibn Ezra's death, a process began in which collections of his astrological writings were transmitted to non-Jewish readers via repeated waves of translations into Latin and the emerging European vernaculars.[5]

The title of this chapter invokes culturally loaded terms such as 'nationality,' 'religious belief,' 'geographical identity,' and 'sociopolitical awareness.' When used in relation to major aspects of the thought of a medieval intellectual such as Abraham Ibn Ezra, all of them are certainly liable to fall into serious anachronism. Nevertheless, my contention is that a careful scrutiny of one of his key texts can shed much light on his thought and mentality, taking into consideration the chronological lapse of almost nine hundred years. But identifying such a text is not simple; despite the significant contribution by his astrological oeuvre to both Jewish and Christian readers, Ibn Ezra never entertained any serious pretension of being innovative in these treatises, which were designed, on the whole, as textbooks or reference works to educate readers in conventional astrological knowledge.

Rather than feel hampered by this aspect of his work, we encounter the lucky chance that most of the introductions he wrote to his astrological treatises feature remarkably creative and idiosyncratic ideas that not only reveal his own approach to a specific system of astrology, but are also related to central concepts of his scientific, religious, philosophical, and cultural worldview. The most brilliant of all these introductions is the one to *Sefer ha-Moladot* (Book of Nativities; henceforth *Moladot*), his only extant complete text in Hebrew on the astrological doctrine of genethlialogy or nativities, whose fundamental principle is that the newborn infant's destiny is determined by the configuration of the celestial bodies at the moment of birth and may be deduced from the natal horoscopic chart.

This introduction, as will be shown below, poses a masterly defense of the doctrine of nativities by offering eight ways to explain away its essential weaknesses. It is particularly relevant to our study that, when fleshing out these eight ways, Ibn Ezra deals precisely with 'nationality,' 'religious belief,' 'geographical identity,' and 'sociopolitical awareness.' Hence my intention here is to catch a glimpse of the mentality and thought of this twelfth-century scholar by means of a close reading and analysis of this text. The complete English translation of the introduction appears in the appendix.[6]

A defense of the doctrine of nativities

Moladot, after cautioning the prospective student of the doctrine of nativities to learn the "supernal science,"[7] begins with a surprising avowal that seems to belittle the doctrine of nativities: "I state it as a general rule that judgments about collectives take precedence over those about individuals" (*Moladot* 1.1–2). In other words, astrological judgments about human beings in larger social and geographical units take precedence over astrological judgments about individuals and their individual destinies. Closer scrutiny, however, reveals that Ibn Ezra neither plays down the doctrine of nativities nor proclaims the supremacy of world astrology over it. Instead, although not stated explicitly, he mounts a sophisticated defense of that doctrine. Going back to antiquity,[8] the doctrine of nativities was regarded as the nucleus of horoscopic astrology; but was also its most vulnerable branch. It comes as no surprise, then, that the opponents of horoscopic astrology usually aimed their shafts at the doctrine of nativities.

One remarkable case, coinciding with the early stages in the development of horoscopic astrology and echoing down through the centuries in the work of both its opponents and advocates, is the attack on astrology unleashed by Cicero (106–43 BCE) in his *De divinatione*. Cicero demonstrates a nodding acquaintance with the essentials of horoscopic astrology and presumes a 'hard version' of nativities, in which the fate of the newborn is totally sealed at the moment of birth by the stars.[9] On this basis, Cicero criticizes the astrologers under the following heads:

(a) Why do two natives[10] born at the same time and in the same place (i.e., twins), and therefore sharing the same natal chart, have different fates?[11]
(b) Why do many natives, born at different times and in different places, and therefore having different natal charts, sometimes share the same fate (i.e., a shipwreck or a military defeat)?[12]
(c) Why do astrologers focus their attention on the natal horoscope and ignore the geographical location of birth (i.e., when natives share a similar natal horoscope because they came into the world at the same time but have a different fate because they were born in different places)?[13]

(d) Why do astrologers disregard the beneficial effect of nature, surgery, or medicine (i.e., that natives born with some natural defect or chronic disease, assumed to have been caused by the celestial configuration at the time of their birth, can be healed by natural means, or by drugs or surgery)?[14]
(e) Why do astrologers pay exclusive attention to the indications of the natal horoscope and ignore other environmental factors such as wind and rain, which also have an effect on birth, or the parental seed, which is an essential element of the process of generation?[15]

In his introduction to *Moladot*, Ibn Ezra emulates Ptolemy's defense of astrology in the *Tetrabiblos*,[16] which was in turn designed to refute arguments similar to those raised by Cicero.[17] In the *Tetrabiblo*s, Ptolemy, like Ibn Ezra a thousand years later, repeatedly assumes that astrological judgments that affect humans individually are subordinate to those that affect humans collectively.[18] Ptolemy also makes substantial concessions to the detractors of astrology, departs from an utterly deterministic perspective of nativities, and asserts that the configuration of the stars at the time of birth is only one of a whole gamut of influential factors, some of them not of a celestial character.[19]

Ibn Ezra builds on these ideas in the introduction to *Moladot* and presents eight ways to explain away the essential weaknesses of the doctrine of nativities that were traditionally invoked by the opponents of astrology. All eight ways follow the same pattern: first Ibn Ezra states a powerful factor that affects human beings collectively and to which the individual destiny signified by the natal horoscope is subordinate. Then, for each way, he offers one or two examples to demonstrate the trustworthiness of the main thesis of this introduction. As we shall see below, the first way is concerned with national-religious identity, the second with geographical environment, the third and fourth ways with catastrophes, the fifth and sixth with sociopolitical status, the seventh again with the geographical environment as reflected in weather, and the eighth way with religious identity again and its role in delivery from the decrees of the stars.

National and religious identity

In the first way, Ibn Ezra transforms the native's national or religious affiliation into a powerful principle that overrides the individual fate signified by the natal horoscope. He begins by telling the astrologer that the first thing he needs to know is the nationality of the person for whom he is about to cast a natal horoscope (*Moladot* 2.1). Then Ibn Ezra offers two colorful examples to show that national affiliation is a crucial collective trait that has the power to set aside the particular fate of individuals specified by their natal charts. These examples are designed to appeal to his Jewish readers: both protagonists are Jews.

In the first example, the Jew is presented as subject to the influence of two conflicting astrological indications. On the one hand, his fate is set by his natal horoscope, which, although he was obviously not born in the purple, destines him to wear a royal diadem. On the other hand, this exalted destiny is thwarted by the great conjunction of Saturn and Jupiter that produced the long exile of the Jewish people.[20] Because the Jew belongs to a nation without territory or self-government, the royal status indicated by his natal horoscope is not realized (*Moladot* 2.2). However, Ibn Ezra asserts, as powerful as the sway of the Saturn-Jupiter conjunction may appear to be, the natal chart continues to play a role. In the final analysis, Ibn Ezra harmonizes the two conflicting astrological trends: although the Jew will not be a king, he will serve as a minister to the crown (*Moladot* 2.3). This status seems to evoke the role played by prominent Jews in Muslim Spain.[21]

Here we should pause to look at the aforementioned conjunctions of Saturn and Jupiter, which play an important role in shaping the medieval identity of the three monotheistic religions. The use of the cycles of the conjunctions of Saturn and Jupiter for world predictions or historical analysis is the most prominent Persian doctrine received by the Arabic world and later bequeathed to the Hebrew and Latin cultures. In its standard form, these conjunctions are divided into three types or cycles: the "small" conjunction, with a period of 20 years between two successive conjunctions; the "middle" conjunction, with a period of 240 years between shifts from one triplicity to another; and the "great" conjunction, with a period of 960 years between two conjunctions in the head of Aries.[22] In the first version of *Sefer ha-'Olam* (Book of the World), on historical, meteorological, and astrological occurrences, Ibn Ezra writes that the great conjunction of Saturn and Jupiter "signifies that a prophet will come to found a nation." [23] In a remarkable passage of the second version of *Sefer ha-'Olam*, he provides a succinct but comprehensive picture of how the conjunctions of Saturn and Jupiter brought about the emergence of the three monotheistic religions. In this account, the births of Jesus and Muhammad were foreshadowed by two Saturn-Jupiter conjunctions in Leo and Scorpio; Ibn Ezra further maintains that Aquarius is the Jews' zodiacal sign, and he implicitly refers to a conjunction of Saturn and Jupiter in Aquarius.[24] In the *Liber de nativitatibus*, Ibn Ezra states explicitly that a powerful conjunction of Saturn and Jupiter in Aquarius portended the Jews' exodus from Egypt; there, in the same breath, he repeats that the births of Jesus and Muhammad were foreshadowed by two Saturn-Jupiter conjunctions in Leo and Scorpio.[25]

Returning to the second example in *Moladot,* we read about a Jew destined by his natal horoscope to be an apostate. To affect this, Ibn Ezra places Saturn in the ninth horoscopic place; but then, without offering any reasonable explanation, he concludes that the Jew will not be an apostate, although a Muslim with a similar natal horoscope will not be steadfast in his faith (*Moladot* 2.4). What role do the ninth horoscopic place and Saturn play in this account? Why has the Jew escaped the negative indication of his natal horoscope? Why does Ibn Ezra consider this example to be relevant to the main topic of the first way?

In this passage, he explores the influence that the stars exert on the religious beliefs of a Jew and a Muslim. He concentrates on the ninth place of the horoscope, which he calls elsewhere "the place of religious belief" and which is usually taken to signify the quality of the native's faith.[26] Ibn Ezra also conveniently places Saturn in the ninth horoscopic place of the Jew's natal horoscope because it is the most malignant of the seven planets.[27] In the first of the ways, collective judgments take precedence over individual judgments and the native's fate is supposed to be subordinated to his national or religious affiliation; hence it is natural to expect that the malefic Saturn, rather than acting on the Jew as an individual, will affect him as a member of a nation or a religion, and exert a different type of astrological influence on him. By contrast, when Ibn Ezra says that Saturn behaves unfavorably towards the Muslim, this should be construed as meaning that Saturn exerts its standard malefic influence on him as an individual.

Underlying this reasoning is the astrological doctrine that certain planets govern entire nations or religions—Venus is the planet of Islam, the Sun of the Christians, and Saturn of the Jews.[28] The association between Saturn and the Jews is already present in Roman and early Christian literature. Both Tacitus (ca. 56–120 CE) and St. Augustine (ca. 354–430 CE) acknowledged Saturn's special connection with the Jews.[29] The first stages of the reception of this idea in Jewish society are shrouded in mystery. However, the name given to Saturn in post-biblical Hebrew attests that Jewish society of late antiquity was aware of some association between Saturn and the Jews: in the Babylonian Talmud, Saturn is *Shabbetai*, that is to say, the star of *Shabbat* (Saturday), the most sacred day of the week for the Jews.[30] The same connection between Saturn and the Jews appears in the work of prominent medieval Arabic

astrologers and thinkers like Māshā'allāh, Abū Ma'shar, al-Qabīṣī, and al-Bīrūnī.[31] Behind the connection between Saturn, Saturday, and the Jews is the well-known astrological theory that assigns the seven planets in succession, beginning with the Sun and following the order of their orbs, to the 24 hours of the day and to the seven days of the week. In this theory, Saturn governs Saturday, thus creating a clear link between the most malefic of the planets and the Jews' most sacred day.

As stated above, Greek and Arabic astrology considered Saturn to be the most malefic of the seven planets. The natural inference is that the Jews, too, astrologically governed by Saturn, should be contaminated by the planet's malignant and wicked nature. As far as I know, Ibn Ezra is the first Jewish thinker to be openly and explicitly concerned with the astrological elements of the problematic association between Saturn and the Jews. He removed the sting of this embarrassing linkage by stressing that Saturn is conducive to a Jew's religious faith, as in his long commentary on Exodus 20:13. There, Ibn Ezra associates Saturn with the fourth commandment's injunction to "remember the Sabbath day and keep it holy" (Ex. 20:8), and explains that the correspondence between the commandment and the planetary orb allows the Jews, who do not engage in everyday matters and devote themselves solely to the fear of God on this day, to protect themselves from Saturn's baneful influence and also to improve the quality of their religious belief.[32]

Another way in which he palliated the association was to place Judaism on the same footing as the other monotheistic religions: the planet that favors the members of its assigned religious congregation bodes ill for the members of other creeds; this rule applies equally to Jews, Christians, and Muslims. Thus, in the *Liber de nativitatibus*, Ibn Ezra states that Saturn in the ninth horoscopic place of a Jew signifies unwavering observance of his faith, but neglect of his faith in the nativity of a Christian or Muslim; the Sun in the ninth place strengthens the faith of a Christian but indicates that the faith of a Jew or Muslim will be weakened; and Mars in the ninth place signifies that a Muslim will be steadfast in his creed but undermines the faith of a Christian and a Jew.[33]

We see, then, that Ibn Ezra construed 'nationality' as a macro-astrological principle, and assigned it several properties. To begin with, 'nationality' is more or less synonymous with 'religion.' Ibn Ezra does not just refer to a Jew vis-à-vis a Muslim, but also deals directly with the 'religious belief' of a Jew and the 'religious belief' of a Muslim. Ibn Ezra also endows the concept of 'nationality' with a cosmic dimension: individuals belonging to different 'nations' are somehow collectively *recognized* by specific planets. Otherwise, how is it possible for Saturn to *recognize* a Jew, so that even if it is in the native's ninth horoscopic house it does not signify that the Jew will become an apostate? But Ibn Ezra also associates 'nationality' with clearly mundane traits, such as possession (or nonpossession) of a territory, or the notion that members of a nation have a common history determined by astrological phenomena such as the Saturn-Jupiter conjunctions. Thus, the Jews are explicitly described by Ibn Ezra as a "nation in exile" (*Moladot* 2.2), and his Jew, even though destined by his stars to be crowned king, will at best "be intimate with kings, mingling and having dealings with him, but . . . he himself will not become a king" (*Moladot* 2.3).

Geographical identity

A common ancient and medieval assumption was that the inhabited area of the earth, the ecumene, is divided into precisely seven climates, bands between two parallels of latitude with various phenomena in common, such as the prevailing weather and length of the longest day in summer.[34] Whenever Ibn Ezra had to specify his location during the itinerant phase of

his life, his habit was to specify the geographical climate. Thus, he begins *Iggeret ha-Shabbat* (Epistle on the Sabbath), a monograph on the Jewish calendar he wrote in England towards the end of his life, with the notation that he is writing "in one of the cities of the island called *Angleterre*, which is situated in the seventh among the climates of the inhabited part of the earth."[35] The second way that collective judgments take precedence over individual judgments involves the transformation of the seven terrestrial climates into a powerful factor that exerts a more powerful influence than does the natal horoscope (*Moladot* 3.1). Here Ibn Ezra implies that astral influences are not uniform all across the earth but vary significantly as a function of these terrestrial climates, to the point that the climate of an individual's birth is more important than his or her natal chart.

The second way addresses a well-known weakness of astrology highlighted by Cicero.[36] Like the first way, it includes two examples; in both, the protagonist is an Ethiopian, a stereotype that was probably inspired by the pejorative description of Ethiopia in Ptolemy's *Tetrabiblos*.[37] In the first example, Ibn Ezra places Venus and the Moon, two benefic planets, in the ascendant degree of the Ethiopian's natal horoscope, leading readers to believe that the Ethiopian, despite being born in the first and southernmost climate, should be as "handsome and white" as persons born in other climates (*Moladot* 3.2). In the second example, Ibn Ezra makes Mercury, which customarily indicates wisdom,[38] the ruler of the Ethiopian's nativity,[39] inducing readers to believe that the Ethiopian should be "a great scholar in various sciences" (*Moladot* 3.3). Both expected favorable outcomes, however, cannot be realized, because the native was born in an extreme geographical environment. In the first example, Ibn Ezra does not explain why it is impossible for an Ethiopian to be as "handsome and white" as persons born in other climates and is probably biased by the stereotype of the Ethiopian in Ptolemy's *Tetrabiblos*. In the second example, though, Ibn Ezra applies the Hippocratic-Galenic theory of the four humors and states that an Ethiopian cannot be "a great scholar in various sciences" because the intense heat of the Sun in Ethiopia unbalances the inhabitants' temperament (*Moladot* 3.4).

Another way to assess the impact of the concept of the seven climates on Ibn Ezra's thought is by studying how he wove it into his biblical commentaries. If we look at his account of the creation, we learn that Ibn Ezra regarded the seven climates not so much as a geographical construct created by scientists to map the ecumene but as a real and natural property created by God and embedded in the earth as an integral part of the divine blueprint for creation.[40] Ibn Ezra repeatedly emphasizes that Jerusalem is located at the very middle of the ecumene.[41] Accordingly, the city's latitude and longitude are regarded as the origin from which other geographical locations are measured.[42] Being located precisely in the center of the seven climates, Jerusalem is the most suitable location for the Temple, because the divine presence is most strongly felt there.[43] Ibn Ezra also postulates that Jerusalem, because of its particular location at the middle of the seven climates, is a place whose inhabitants are bound to receive wisdom.[44]

It turns out, then, that the Ethiopian, however favored by the planet Mercury in his natal horoscope, will not be wise in any of the sciences, because he was born in one of the most extreme climates. But the inhabitants of Jerusalem, even if handicapped by an unfavorable individual horoscope, are fit to receive wisdom because they were born in the middle of the seven climates. Both statements are based on the second way presented in the introduction of *Moladot:* human beings with similar natal horoscopes may nonetheless meet a different fate because they dwell in different climates. But Ibn Ezra seeks to reconcile the overriding power of the seven climates with the particular outcome of the natal horoscope: even though it is not likely that Ethiopians will be wise in the sciences, if some Ethiopian has been fortunate enough

to be born when Mercury has an especially favorable bearing on his natal horoscope, he will be more intelligent than his fellow-countrymen (*Moladot* 3.4).

Catastrophes

In the third and fourth ways, Ibn Ezra tackles a palpable weakness of the doctrine of nativities: why people who have different natal charts may share the same fatal destiny, such as falling in battle or succumbing to a plague.[45] In both cases, Ibn Ezra invokes a city to illustrate the tragic and fatal collective fate: the individual natal horoscopes of the city's inhabitants are completely overridden, leading to their death by war or disease. To explain how and why such a dramatic outcome may take place, Ibn Ezra cites two classical astrological phenomena, customarily applied in world astrology, as powerful principles that cancel out the indication in the natal horoscope.

In the third way, the great conjunction of Saturn and Jupiter is invoked as a macro-astrological principle in its own right (and not merely as an illustrative tool, as in the first way), one that determines that many of those born in a city will be killed, even though their nativities do not indicate that they will die by the sword (*Moladot* 4.1–2). In the fourth way, the "revolution of the world," that is, the celestial configuration that recurs every year when the Sun enters Aries and that is used to forecast world affairs during the next year, causes the residents of a city to succumb to a plague, even though their individual natal horoscopes do not indicate that any of them will fall ill in the course of this year (*Moladot* 5.1–2).

Sociopolitical awareness

The fifth way is concerned with the social rank of the family; the sixth, with the authority of the king. These are two seemingly non-astrological factors whose societal application may be taken as the antithesis of the obviously astrological character of the agents of the third and fourth ways, that is, the Saturn-Jupiter conjunction and the revolution of the world. But the fifth and sixth ways provide a window into the sociopolitical mindset and awareness of an astrologically minded intellectual of the twelfth century: instead of conceiving of social status derived from family standing or political power as sociological factors created by a combination of structural traits of society, or as personal factors determined by the free will of individuals, Ibn Ezra converts them into macro-astrological factors that control social mobility.

The fifth way subordinates the individual fate signified by the natal horoscope to the family's social rank (*Moladot* 6.1), a clearly non-astrological factor, thereby explaining away the 'twins' case, a fundamental weakness of the doctrine of nativities: why two children, born at the same time and place, and therefore having the same natal horoscope, sometimes have a different fate. In the single example of the fifth way, the role of the twins is played by the son of a duke, on the one hand, and the son of a baker's servant, on the other, whose natal horoscopes predict that they will both rise to higher rank and supreme power. But, taking into account the harsh realities of life, is it realistic to predict that the son of a duke and the son of a baker's servant (born at the same moment in the same city and consequently having an identical natal horoscope) will attain identical high rank and power? To escape this awkward situation, Ibn Ezra applies the principle that the family's social rank carries more weight than the signification of the natal horoscope; hence the duke's son will become king, whereas the servant's son will become a merchant (*Moladot* 6.2). For Ibn Ezra, evidently, being a merchant is the zenith to which a prosperous commoner can aspire. Here, as in the case of the Jewish minister, Ibn Ezra is probably mirroring a

true picture of fairly extensive social mobility, borne out by the historical merchants represented by documents from the Cairo Geniza.[46]

In the sixth way, Ibn Ezra is again concerned with the problem of why people with different natal charts sometimes meet the same destiny. As in the third and fourth ways, so too in the sixth way the powerful factor that cancels out the significations of many natal horoscopes is an astrological agent, although of a peculiar nature: not the natal horoscope of a commoner but that of a king (*Moladot* 7.1). According to the single example of the sixth way, if a king's natal horoscope determines that he will go to war, then the king's subjects, even though their natal horoscopes do not indicate that they will leave home, will be forced to go on campaign with their king. Thus, in contrast to the third and fourth ways, where world astrology explains away the weaknesses of the doctrine of nativities, in the sixth way, the impact of the natal horoscope depends on the native's sociopolitical status, clearly a noncelestial factor (*Moladot* 7.2).

The fury of the elements

The seventh way converts the natural environment, as reflected in the weather (whose disregard is one of the weaknesses of nativities highlighted by Cicero),[47] into a powerful principle that cancels out the signification of the natal horoscope. Here Ibn Ezra focuses on a classic scenario of the Mediterranean basin, where sailing in winter is a perilous venture (*Moladot* 8.1). Here the concept of natural environment is pithily denoted by the Hebrew biblical word *toledet* (Gen. 2:4 *et passim*), which Ibn Ezra uses as a rule to denote the concept of the natural environment and its diverse phenomena, such as the four elements and their qualities and the physical qualities of the planets and the zodiacal signs, but seldom used with the sense of 'weather.'[48] In both of the examples of the seventh way, the weather causes a shipwreck.

In the first example, the fury of the elements strikes a single traveler, who has tried unsuccessfully to avert disaster by determining a fortunate time for beginning his journey. It is noteworthy that in this example Ibn Ezra does not subordinate the outcome of the natal horoscope to some powerful factor, as he does in all the other examples in the introduction to *Moladot*, but contrasts the superior force of the weather over a horoscope cast according to the astrological doctrine of elections, which aims to find the most propitious moment for beginning a particular activity.[49] The astrologer placed Jupiter and Venus, two benefic planets, in the ascendant degree of an electional horoscope—but to no avail (*Moladot* 8.2).

In the second example, Ibn Ezra proclaims that the fury of the elements has the power to doom a thousand persons on a ship, even though their natal horoscopes reassured them that they would survive the year (*Moladot* 8.3). This example, like those in the third, fourth, and sixth ways, is designed to justify the failure of the doctrine of nativities to explain catastrophes in which many people with different natal charts sometimes meet the same fatal destiny.

In a final remark, however, Ibn Ezra seriously qualifies these examples: he somewhat surprisingly asserts that an astrologer could have predicted the disaster at sea had he adequately analyzed the travelers' natal horoscopes. In this case, Ibn Ezra says, the astrologer would have found that "one of the lords of life reached a dangerous place" in every traveler's natal horoscope (*Moladot* 8.4). This is a reference to the procedure of "direction" or "prorogation," used in the doctrine of nativities to determine the native's lifespan.[50] Two important points emerge from the final remark, which highlight subtle aspects of Ibn Ezra's approach to the doctrine of nativities. First, to Ibn Ezra's mind, it is not so much a defect in the doctrine of nativities itself but the improper implementation of this doctrine that is responsible for the natal horoscope's failure to provide precise predictions. Second, just as in the third and fourth ways where Ibn Ezra implicitly gives world astrology supremacy over the doctrine of nativities,

so too in the seventh way he proclaims the supremacy of the doctrine of nativities over the doctrine of elections, an approach that is conspicuous in Ibn Ezra's works on the latter.[51]

Wisdom, religious belief, and deliverance from the decrees of the stars

In stark contrast to the utter fatalism of the doctrine of nativities (and of the third, fourth, and seventh ways), the eighth way focuses on the possibility of deliverance from the influence of the stars. This idea occurs in Jewish astrology as early as Talmudic times, notably in the discussion of astrology in the tractate *Shabbat* (156ab).[52] Here Ibn Ezra converts "the power of the soul, whose power resides in wisdom," into a principle that has the power to cancel out the decrees of the natal chart (*Moladot* 9.1). He is probably referring to the 'supernal soul,' the highest component of the tripartite soul (the vegetative or appetitive soul; the animal or locomotive soul; and the wise or supernal soul), which, for Ibn Ezra, is the most significant means by which human beings can evade the decrees of the stars.[53]

The protagonist of the first example is an astrologer who casts, for his own benefit, a horoscope of the "revolution of the year," which is meant to predict the native's fate in the next year by means of an examination of the celestial configuration that takes place every year when the Sun arrives at the point in the zodiac that it occupied at his own nativity. From this horoscope, the astrologer learns that he will fall seriously ill with fever during the coming year and determines the precise moment of its onset—a prediction that enables him to take medical precautions and saves him from certain death (*Moladot* 9.2–3). In other words, the protagonist of the first example combines astrology with medical knowledge and epitomizes a rational and manifestly scientific methodology that allows him to remedy some of the physical harm that the stars would otherwise inflict on him. Here Ibn Ezra was probably inspired by Ptolemy in the *Tetrabiblos*, who, in his defense of astrology, acknowledges the collaboration between astrology and medicine in averting the decrees of the stars.[54]

The second example is personified by the "righteous person," whom Ibn Ezra describes as "trusting in God with all his heart"; he is better guarded than the astrologer and therefore is delivered totally, thanks to divine intervention, "from any harm prognosticated in his nativity" (*Moladot* 9.4–5). This leads us to realize that Ibn Ezra actually entertains two ways to escape astral decrees. One of them, offered in the first example of the eighth way, as well as in Ibn Ezra's introductions to his works on the doctrine of elections,[55] allows only partial escape from stellar influences. The second approach, in the second example of the eighth way, permits total liberation from them. Although Ibn Ezra does not amplify further on the second approach in the introduction to *Moladot*, we can glean useful information about it from other parts of his oeuvre.

Following (in all likelihood) Avicenna, Ibn Ezra sees reality as divided into three worlds.[56] Above the sublunar and supralunar domains is the domain of the "holy angels" or the "separate intelligences."[57] Thus, in Ibn Ezra's philosophical system, the human supernal soul, or the aforementioned "power of the soul, whose power resides in wisdom," comes neither from the sublunar nor the supralunar domains, but from the third and "uppermost" domain. This is elegantly presented in the introduction to the second version of *Sefer ha-Mivharim* (Book of Elections), where Ibn Ezra asserts that "the soul of man has been created in a place that is higher than the stars."[58] This picture is completed in Ibn Ezra's biblical commentaries, where we learn that a man's soul derives from the light of the "holy angels," that is, from the domain of the separate intelligences, and receives a supernal power according to the configuration of the planets and the fixed stars at the time of his birth. When it grows wise, the supernal soul joins the company of the separate intelligences and communes with the

glorious God.[59] As a result, a man can protect himself from *any* harm decreed by the configuration of the stars at the time of his birth.[60]

Appendix: The introduction to *Sefer ha-Moladot*

1 (1) Abraham the Spaniard said: Anyone who is versed in the science of the judgments of the zodiacal signs but is not acquainted with the supernal science will sometimes make erroneous <astrological> judgments, because he is not wary of matters that require caution. (2) I state it as a general rule that judgments about collectives take precedence over those about individuals, in eight ways, which I now present:

2 (1) The first is that he [the astrologer] needs to know to which nation the native belongs. (2) If the nativity is that of a Jew and he [the astrologer] sees in the astral configuration of his [the Jew's] nativity that he will become a king, he should not pronounce such a judgment [i.e., that this Jew will be crowned king], for it has already been shown by the great conjunction, that is, the conjunction of Saturn and Jupiter, that his [the Jew's] nation is in exile. (3) But <judgments about> collectives cannot <totally> abrogate the power of <judgments about> individuals, so he should judge that the native will be intimate with kings, mingling and having dealings with them, but not that he himself will become a king. (4) Likewise, if he [the astrologer] finds that Saturn is in the ninth <place> in a Jew's nativity, it does not signify that the native will be weak in his religious belief; but it does if it [Saturn] is in the nativity of an Ishmaelite.

3 (1) The second way relates to the climates. (2) If the native was born in Ethiopia, even though Venus and the Moon are in the ascendant degree <of his nativity>, we will not judge that the native will be as handsome and white as persons <born> in other climates, but only compared to the form and figure of persons of the same climate. (3) Likewise, if Mercury is the ruler of the nativity, we shall not judge that <the native> will be a great scholar in various sciences, inasmuch as it is impossible for there to be a scholar in Ethiopia because of the intense heat of the Sun <there>. (4) As a result, their temperament is not balanced; we should judge only that he may be more intelligent than his countrymen.

4 (1) The third way is the <astrological judgments affecting> collectives stemming from the great conjunction <of Saturn and Jupiter>, <which holds sway> over every city. (2) Thus, if the power of the conjunction determines that a certain city will be plunged into war, even though the nativities of many of those born in the city do not indicate that they will die by the sword, when the city's doom comes they will be all killed.

5 (1) The fourth way relates to the revolution of the world. (2) If a plague breaks out in a certain city as a result of the <astrological judgments affecting> collectives stemming from the revolution <of the world>, even though the nativity of one of its inhabitants does not indicate that he will fall ill that year, he will nevertheless be struck by the disease, because the <astrological judgments affecting> individuals cannot annul <astrological judgments affecting> collectives.

6 (1) The fifth way is concerned with the <native's> family. (2) If two children are born at the same moment in the same city, one of them the son of a duke and the other the son of a baker's servant, and the nativity of each predicts that they will rise to higher rank and supreme power, then the son of the duke will become king and the son of the servant will become a merchant.

7 (1) The sixth way is concerned with the <nativity of the> king, for his power is equivalent to a power affecting collectives. (2) Thus, if the king's nativity determines that he will go to war, he will send into battle many people whose nativities do not determine that they will leave home.

8 (1) The seventh way is concerned with nature [*ha-toledet*]. (2) If somebody sails on a ship in the cold season and there is a storm at sea—even though he [the astrologer] put Jupiter and Venus, which are the benefic stars, in the ascendant degree <of the electional horoscope>—he [the person sailing on a ship] will not survive, for nature affects collectives, and the individual election will not avail him. (3) The same holds for a thousand people sailing together in one ship—<all of them will die if there is a storm at sea> even though not one of them has a nativity that determines that he will die that year. (4) But <the astrologer> may find in the nativity of each that one of the lords of life reached a dangerous place, so that if he [the native] had not gone to sea, which is a perilous place, he would have met with only lesser harm and would have survived.

9 (1) The eighth way is concerned with the power of the soul, whose power resides in wisdom. (2) Consider the case that the native is an astrologer who observes in his <horoscope of the> revolution of the year that he will come down with fever at a certain time when Mars enters the degree of the ascendant <of the horoscope of the revolution of the year>. (3) If he takes precautions before the illness comes, abstaining from hot foods and drinking beverages in order to cool his body, then he will maintain a balance in his bodily temperament when Mars enters the degree of the ascendant. (4) Likewise, he who trusts in God with all his heart, God—"by Him actions are weighed" (1 Samuel 2:3)—will effect causes for himself that save him from any harm prognosticated in his nativity. (5) Therefore, there is no doubt that the righteous person is better protected than a scholar versed in astrological judgments, since sometimes the scholar's <astrological> judgments will be faulty, as Scripture says (Isaiah 44:25), "and make fools of the augurs"; whereas he whose heart is wholly with his God is fortunate.

Notes

1 For Ibn Ezra's biography during his wanderings through Italy, France, and England, see Roth 2012, 25–39.

2 For a chronological list of Ibn Ezra's scholarly writings (biblical commentaries; books on the Hebrew language or theology; scientific treatises), see Sela and Freudenthal 2006, 13–55.

3 See Langermann 1993; Sela 1999.

4 Today we know that Ibn Ezra composed at least nineteen astrological treatises, which cover all the branches of Greco-Arabic astrology. These treatises are: (1–3) *Reshit Hokhmah* (Beginning of Wisdom, two versions), and *Mishpetei ha-Mazzalot* (Book of the Judgments of the Zodiacal Signs), which are introductory textbooks of astrology; (4–5) *Sefer ha-Te'amim* (Book of Reasons, two versions), which explains the astrological reasons behind the concepts employed in both versions of *Reshit Hokhmah*; (6–8) *Sefer ha-Moladot* (Book of Nativities, two versions [the second version survives today in a Latin translation entitled *Liber nativitatum*]), and a Latin treatise entitled *Liber de nativitatibus*, which is probably a translation from a lost Hebrew text by Ibn Ezra, on genethlialogical astrology; (9) *Sefer ha-Tequfah* (Book of the Revolution), on continuous horoscopy; (10–11) *Sefer ha-'Olam* (Book of the World, two versions), on historical and meteorological astrology; (12–14) *Sefer ha-Mivharim* (Book of Elections, three versions), on choosing the most auspicious moment for performing specific actions; (15–17) *Sefer ha-She'elot* (Book of Interrogations, three versions), on replying to questions addressed to the astrologer; (18–19) *Sefer ha-Me'orot* (Book of the Luminaries, two versions), on medical astrology.

5 Thorndike 1944; Smithuis 2006, 244–69.

6 This translation, and the corresponding critical edition of the Hebrew text, are based on Sela 2013, 84–9. To facilitate references, I divided the introduction into sections and sentences. All references here to the introduction of *Sefer ha-Moladot* are in the following format: *Moladot* 2, 3 = Appendix, Introduction of *Sefer ha-Moladot*, section 2, sentence 3.

7 This term is used by Ibn Ezra predominantly in his biblical commentaries, where it appears to denote the discipline that inquires into the most fundamental and profound laws of the universe. See, for example, long commentary on Daniel 2:2; commentary on Ecclesiastes 7:3, 12:1. All references to biblical commentaries by Abraham Ibn Ezra or others are based on *Miqra'ot Gedolot ha-Keter*, ed. Menachem Cohen, Digital Edition (Ramat Gan: Bar-Ilan University Press, 2011). All the translations are mine.
8 See Melamed, 114–130 in this volume.
9 *Cic. Div.* 2.89. For an analysis of Cicero's attack on astrology, see Long 1982, 168–78 and also Gibbons, this volume.
10 The term "native" denotes here the person for whom a natal horoscope is cast.
11 *Cic. Div.* 2.90.
12 Ibid., 2.97.
13 Ibid., 2.96–7.
14 Ibid., 2.96.
15 Ibid., 2.94.
16 Claudius Ptolemy is Ibn Ezra's most important astrological and scientific source; he refers to him more often than to any other scientist or astrologer. In his astrological writings, Ibn Ezra refers explicitly to Ptolemy's *Tetrabiblos* a number of times, by a variety of titles. See Sela 2013, 220–21, 307. For Ibn Ezra's approach to Ptolemy, in general, and to Ptolemy's *Tetrabiblos*, in particular, see Sela 2003, 220–56. On Ptolemy's *Tetrabiblos* and determinism, see Komorowska, 353–372 in this volume.
17 For an analysis of Ptolemy's defense of astrology in the *Tetrabiblos*, see Long 1982, 178–83.
18 Robbins 1940, 2.1.117–19: "Since prognostication by astronomical means is divided into two great and principal parts, and since the first and more universal is that which relates to whole races, countries and cities, which is called general, and the second and more specific is that which relates to individual men, which is called genethlialogical, we believe it fitting to treat first of the general division, because such matters are naturally swayed by greater and more powerful causes than are particular events." See also Robbins 1980, I.3, 23–5; 4.10, 439.
19 Robbins 1980, 1.2.17–19: "But in an inquiry concerning nativities and individual temperaments in general, one can see that there are circumstances of no small importance and of no trifling character, which join to cause the special qualities of those who are born. For differences of seed exert a very great influence on the special traits of the genus . . . For if the seed is generically the same, human for example, and the condition of the ambient the same, those who are born differ much, both in body and soul, with the difference of countries. In addition to this, all the aforesaid conditions being equal, rearing and customs contribute to influence the particular way in which a life is lived. Unless each one of these things is examined together with the causes that are derived from the ambient . . . they can cause much difficulty for those who believe that in such cases everything can be understood, even things not wholly within its jurisdiction, from the motion of the heavenly bodies alone."
20 This is an implicit reference to a conjunction of Saturn and Jupiter in Aquarius, as explained below.
21 Ibn Ezra, a twelfth-century Spaniard, probably took his inspiration for this example from famous historical figures such as Ḥasdai Ibn Shaprut (d. c. 975) in Cordoba and Samuel b. Naghrillah ha-Nagid (d. 1055/6) in Granada.
22 Yamamoto and Burnett 2000, I, 582–7; Pingree 1997, 39–75.
23 Sela 2010, §10:2, 56–7.
24 See Sela 2010, §14:2–5, 164–5: "But it has been proven by experience that Leo and the Sun <govern> Edom [i.e., the Christians], and it was there [in Leo] that the conjunction <of Saturn and Jupiter> before the birth of the man whom they deem to be God [Jesus] took place. Aquarius is the zodiacal sign of Israel, but know that our sages said that "there is no *mazzal* [astrological configuration] for Israel" [Israel is immune from astrological influence] (B *Shabbat* 156a, *Nedarim* 32a). This is true, because as long as they cleave to God no zodiacal sign exerts any influence on them, whether for good or for evil. Cleaving to God means knowing Him and observing His commandments. And this is the meaning of "which the Lord thy God has allotted unto all the peoples" (Deut. 4:19), and after that it is written: "the Lord has taken you" (Deut. 4:20). But when Israel is not on the straight path the zodiacal sign dominates them, and then they are regarded the same as all the other nations. The conjunction <of Saturn and Jupiter> that took place before the emergence of the Muslims' prophet [Muhammad], according to their opinion, occurred in the sign of Scorpio."
25 *Liber Abraham Iude de nativitatibus* (Venetia: Erhard Ratdolt, 1484), sig. C1v: "Sciendum etiam quod adunatio Iovis et Saturni fuit in Aquario ante exitum Iudeorum de Egypto. Eorundem vero adunatio fuit in Leone ante Christi nativitatem. Eorundem vero adunatio fuit in Scorpione ante nativitatem Machometi."

26 See, for example, Levy and Cantera 1939, III, xlii, (lines 10–11). Claudius Ptolemy named it the "House of the God" (Robbins 1980, III:10, 272–3). Abū Ma'shar, too, designated the ninth place "the place of faith" (Yamamoto and Burnett 2000, II, §1.4.3, 44–5).
27 See Robbins 1980, II:8, 179–81; Al-Qabīṣī 2004, II:2, 63; Ramsay Wright 1934, §396–401, 240; Abū Ma'shar 1994, 5.4, p. 61.
28 See, for example, Ramsay Wright 1934, §433–4, 253.
29 Tac. *Hist.* 5.4; *De Consensu Evangelistarum*, S. Augustini, Migne J.-P., ed., Patrologiae Latinae, Tomus 32, Turnhout 1969, lib. I, xxi–xxii, col. 1055.
30 See B *Shabbat* 156 a.
31 See Al-Qabīṣī 2004, 2.4, 65; Yamamoto and Burnett 2000, §1.4:4, 45; Ramsay Wright 1934, §433–4, 253. See also Zafran 1979; Sela 2004.
32 Long commentary on Ex. 20:13: "The Fourth Commandment, the Commandment of *the Sabbath (Remember the Sabbath day and keep it holy* [Ex. 20:8]) corresponds to the orb of Saturn. The scientists who rely on experience say that for each one of the planets there is a fixed day of the week on which its power is manifest, and it is lord of the first hour of that day. Similarly there is a lord of the first hour of the night. They say that Saturn and Mars are destructive planets, and whoever starts a job or begins a journey will come to harm. Therefore, Our ancient sages, their memory for a blessing, said that permission was given to cause damage on Tuesday nights and Friday nights (B *Pesahim* 112b). Behold, you will not find during the entire week, a night followed by a day, in which these two destructive planets rule, except on this day. Therefore, it is not desirable to be busy with worldly things on it, but only with the fear of God Himself." This commentary is quoted in Sela 2013, 440–41.
33 *Liber Abraham Iude de nativitatibus* (Venetia: Erhard Ratdolt, 1484), sig. C1v: "Saturnus in nona in nativitate Iudei suam fidem constanter servaturam ostendit, in Christiani vero nativitate suam fidem neglecturam iudicat, Sarraceni quoque nascentis idem fidem infirmat. Sol vero in nona, fidem Christiani nascentis consolidat, Iudei et Sarraceni, fidem nascentis negligendam ostendit. Mars in nona Sarraceni fidem servandam docet, Christiani vero et Iudei nascentis fidem in irritum ducit."
34 See Komorowska, 353–372 in this volume.
35 Goodman 2009, 3 (Hebrew part).
36 *Cic. Div.* 2.96: "Quid? Dissimilitudo locorum nonne dissimiles hominum procreationes habet?"
37 Robbins 1980, 1.11, 120–23.
38 Robbins 1980, 3.13, 332–3; Levy and Cantera 1939, IV, xlix (lines 9–10).
39 The ruler of the nativity, according to Ibn Ezra (Sela 2013, 3.i.3, 1–5, 100–101), is the planet that exerts lordship over the five places of life or over most of them. The five places of life are: (1 & 2) the positions of the two luminaries; (3) the position of the conjunction or opposition of the luminaries, whichever occurs last before the birth of the native; (4) the degree of the ascendant; and (5) the lot of Fortune.
40 See, for example, Ibn Ezra's commentaries on Psalms 89:12 and Job 38:5.
41 Thus, in his long commentary on Daniel 8:9, he writes that "the latitude of Jerusalem is 33°, therefore it is located at the middle of the inhabited part of the earth, for the ecumene stretches from the equator as far as 33°, and the circle of the zodiacal signs has a declination of 24° with respect to the equatorial circle."
42 See, for example, second commentary on Genesis 11:2, long commentary on Exodus 8:18 and 1:12, commentary on Psalms 50:2, first commentary on Genesis 33:10.
43 See Ibn Ezra's commentary on Psalms 50:2, 87:5, 102:14; first commentary on Genesis 33:20; long commentary on Exodus 8:18; 15:17; 26:1.
44 Ibn Ezra's commentary on Ecclesiastes 1:12: "He said 'in Jerusalem,' because it is located in a place specially apt to receive wisdom. For it is known that the inhabited part of the earth is divided into seven parts and it is impossible for upright people, capable of receiving wisdom, to be found anywhere except in the middle three sections. For in the first and last pairs of sections, excessive heat or cold prevents <the formation of> a sound human temperament. And it is known that the latitude of Jerusalem is 33°, that is, the middle of the ecumene."
45 *Cic. Div.* 2.97: "Ego autem etiam haec requiro, omnesne, qui Cannensi pugna ceciderint, uno astro fuerint? exitus quidem omnium unus et idem fit." The same point is addressed in Ptolemy's defense of astrology. See Robbins 1980, 1.3, 23–5.
46 This documentary hoard, as shown by S.D. Goitein in his *A Mediterranean Society*, gives a picture of fairly extensive social mobility, enabling commoners to attain economic wealth and political power in their communities via successful commercial ventures. See Goitein 1967, 75–80, 149–61.
47 *Cic. Div.* 2.94.

48 For Ibn Ezra's motivation behind the creation of this neologism and its usage in his oeuvre, see Sela 2003, 130–37.

49 In all the branches of horoscopic astrology, except for the doctrine of elections, the time for casting the horoscope is given *beforehand* and corresponds, for example, to the time of the native's birth (the doctrine of nativities). But the doctrine of elections works the other way round: given some activity (such as embarking on a journey, taking a medicine, getting married, founding a city, determining a baby's sex, conspiring against the king, etc.), the astrologer is required to determine a propitious time to begin this activity, a time that corresponds to a celestial configuration that gives a favorable signification for the requested activity. This favorable time is determined by deliberately finding or *choosing* (whence the name "doctrine of elections") a convenient ascendant, and by casting and analyzing the corresponding horoscope.

50 In this procedure, life is represented as a continuous progression of an initial zodiacal point, until it reaches a dangerous place or place of death, which symbolizes threats to the native's life and, ultimately, death. See Robbins 1980, 3:10, 271–307.

51 See Sela 2011, 46–7, 142–3.

52 This Talmudic texts conveys two contrasting messages: on the one hand, predictions based on examination of the celestial configuration at the time of birth may be reliable; on the other hand, the decrees of the stars are not inevitable and astral influences may be counteracted by good deeds.

53 The tripartite soul can be traced back to Plato (*Timaeus* 69a, 69d, 79d) and Aristotle (*De anima* 413a–b and 414a–b0. Following Plato, Galen identifies three main faculties of the soul—the rational (*logistikon*), the spirited (*thymoeides*), and the appetitive (*epithymetikon*)—and correlates these three main vital functions with the three main organs of the body—the brain, the heart, and the liver (Lloyd 1973, 140). This is how Ibn Ezra speaks in his long commentary on Exodus 6:3 of the human supernal soul as the means by which human beings can evade the decrees of the stars: "The lower world receives power from the middle world [the superlunary domain of stars and orbs]—each one of its parts [i.e., of the lower world] according to the upper configuration <of the stars>. But since the human soul is higher than the intermediary world, if the soul becomes wise and apprehends the deeds of God, which are [both] without intermediary and through an intermediary, and if it renounces the desires of the lower world and secludes itself to cleave to the Glorious Name—then, if according the configuration of the stars at the moment of conception some misfortune was to occur to him at a certain time, God, to Whom he has cleaved, will effect causes to save him from his misfortune."

54 Robbins 1980, 1.3, 23, 31–3.

55 See Sela 2011, 46–7, 142–3.

56 This emerges from the fact that one of Ibn Ezra's earliest works is *Hay ben Meqiṣ* (Living, Son of Awake), a treatise in rhymed prose that relates a journey through these three worlds and closely follows a work of Avicenna's work with the equivalent title, *Hay ibn Yaqzān*. For discussions of *Hay ben Meqiṣ* see: Greive 1973, 104–22; Hughes 2002, 1–24; Hughes 2004, 306–11.

57 The separate intelligences are non-physical entities, emanating from the First Being, which consist of pure thought and correspond in number to the orbs; each of these intelligences acts as the object of the mind of an orb and is the cause of its movement. The last intelligence in the sequence of emanations, an emanation of all intelligences, called the "Active Intellect," has the sublunar world in its care. See Davidson 1992, 91–4.

58 Sela 2011, 142–3.

59 Long commentary on Ex. 3:15: "The uppermost world is the world of the holy angels . . . The soul of man <derives> from their [the holy angels'] light and receives supernal power according to the configuration of the planets, <and according to the position of> each planet in relation to the great host [the fixed stars] at the time of his birth. If the soul grows wiser, it can join the company of angels, and then it can receive a power greater than the supernal power it received from the light of the angels; then it [the wise man's soul] will be in conjunction with the glorious Name."

60 Long commentary on Ex. 6:3: "We know that God created the three worlds that I have mentioned [see long commentary on Ex. 3:15], and that the lower world receives power from the middle world [the superlunar domain of stars and orbs]—each part [of the lower world] according to the upper configuration <of the stars>. But since the human soul is higher than the intermediary world, if the soul becomes wise and apprehends the deeds of God, [both] those that are not through an intermediary and those that are through an intermediary, and if it renounces the desires of the lower world and secludes itself to cleave to the Glorious Name—then, if according the configuration of the stars at the moment of conception some misfortune was to occur to him at a certain time, God, to Whom he has cleaved, will effect causes to save him from his misfortune."

Bibliography

Abū Ma'shar. 1994. *The Abbreviation of the Introduction to Astrology, together with the Medieval Latin Translation of Adelard of Bath*, edited and trans. by C. Burnett, K. Yamamoto and M. Yano. Leiden: E.J. Brill.

Al-Qabīṣī (Alcabitius). 2004. *The Introduction to Astrology*, *Editions of the Arabic and Latin Texts and an English Translation*, edited and trans. by C. Burnett, K. Yamamoto and M. Yano. London and Turin: The Warburg Institute—Nino Aragno Editore.

Davidson, Herbert A. 1992. *Alfarabi, Avicenna, and Averroes, on Intellect*. New York: Oxford University Press.

Goitein, Shelomo D. 1967. *A Mediterranean Society*. Berkeley: University of California Press.

Goodman, Mordechai S., ed. and trans. 2009. *The Sabbath Epistle of Rabbi Abraham Ibn Ezra, Iggeret haShabbat*: Jerusalem: Ktav.

Greive, Hermann. 1973. *Studien zum Jüdischen Neoplatonismus: Die Religionsphilosophie des Abraham Ibn Ezra*. Berlin: Walter De Gruyter.

Hughes, Aaron. 2002. "The Three Worlds of Ibn Ezra's *Hayy ben Meqitz*." *Journal of Jewish Thought and Philosophy* 11:1–24.

———. 2004. "A Case of Twelfth-Century Plagiarism? Abraham Ibn Ezra's *Ḥay ben Meqitz* and Avicenna's *Ḥayy Ibn Yaqzân*." *Journal of Jewish Studies* 55: 306–11.

Langermann, Y. Tzvi. 1993. "Some Astrological Themes in the Thought of Abraham Ibn Ezra." In *Rabbi Abraham Ibn Ezra: Studies in the Writings of a Twelfth-Century Jewish Polymath,* edited by I. Twersky and J.M. Harris, 28–85. Cambridge, MA: Harvard University, Center for Jewish Studies.

Levy, Raphael and Cantera, Francisco. eds. and trans. 1939. *The Beginning of Wisdom*, *An Astrological Treatise by Abraham Ibn Ezra*. Baltimore, MD: Johns Hopkins University Press.

Lloyd, Geoffrey E.R. 1973. *Greek Science after Aristotle*. New York and London: Norton.

Long, Anthony A. 1982. "Astrology: Arguments Pro and Contra." In *Science and Speculation*, edited by J. Barnes, J. Brunschwig, M. Burnyeat and M. Schofield, 165–92. Cambridge: Cambridge University Press.

Pingree, David. 1997. *From Astral Omens to Astrology from Babylon to Bīkāner*. Roma: Istituto italiano per l'Africa e l'Oriente.

Ramsay Wright, R. ed. and trans. 1934. Al-Bīrūnī, *The Book of Instruction in the Elements of the Art of Astrology*. London: Luzac.

Robbins, Frank E. trans. 1940. *Ptolemy: Tetrabiblos*. London: W. Heinemann.

Roth, Normann. 2012. "Abraham Ibn Ezra—Highlights of His Life." *Iberia Judaica*: 25–39.

Sela, Shlomo. 1999. *Astrology and Biblical Exegesis in Abraham Ibn Ezra's Thought* (Hebrew). Ramat Gan: Bar-Ilan University Press.

———. 2003. *Abraham Ibn Ezra and the Rise of Medieval Hebrew Science*. Leiden: EJ Brill Academic Publishers.

———. 2004. "Abraham Ibn Ezra's Appropriation of Saturn." *Kabbalah* 10: 21–53.

———. ed. and trans. 2010. *The Book of the World A Parallel Hebrew-English Critical Edition of the Two Versions of the Text*. Leiden: EJ Brill.

———. ed. and trans. 2011. *Abraham Ibn Ezra on Elections, Interrogations and Medical Astrology, A Parallel Hebrew English Critical Edition of the Book of Elections (3 Versions), the Book of Interrogations (3 versions) and the Book of the Luminaries.* Leiden: EJ Brill.

———. ed. and trans. 2013. *Abraham Ibn Ezra on Nativities and Continuous Horoscopy, A Parallel Hebrew English Critical Edition of the Book of Nativities and the Book of Revolution*. Leiden and Boston, MA: EJ Brill Academic Publishers.

Sela, Shlomo and Gad Freudenthal. 2006. "Abraham Ibn Ezra's Scholarly Writings: A Chronological Listing." *Aleph* 6: 13–55.

Smithuis, Renate. 2006. "Abraham Ibn Ezra's Astrological Works in Hebrew and Latin—New Discoveries and Exhaustive Listing." *Aleph* 6: 239–338.

Thorndike, Lynn. 1944. "The Latin Translations of the Astrological Tracts of Abraham Avenezra." *Isis* 35: 293–302.

Yamamoto, Keiji and Charles Burnett, eds. and trans. 2000. *Abū Ma'shar on Historical Astrology, The Book of Religions and Dynasties (On the Great Conjunctions)*. Leiden: EJ Brill.

Zafran, Eric. 1979. "Saturn and the Jews." *Journal of the Warburg and Courtauld Institutes* 42:16–27.

16

THE LOST ORIGINS OF THE DAYLAMITES

The construction of a new ethnic legacy for the Buyids

Christine D. Baker

Introduction

The Buyid ruler ʿAdud al-Dawla (d. 983 CE), a Persian Shiʿi commander whose father and uncles, the founders of the Buyid dynasty, had conquered much of Iran and Iraq in the mid-tenth century, entered Baghdad in 979 CE. The Sunni Abbasid caliph al-Taʿi (r. 974–91 CE), whose capital was Baghdad, named him the *Amir al-Umara*, prince of princes.[1] ʿAdud al-Dawla arose from the Daylamites, a Persianate people from the isolated mountains of northern Iran, who were considered barely Persian, Muslim haters. Within Persian myth and Zoroastrian cosmogony, the cold, mountainous Daylam produced warlike, uncivilized peoples who would not be fit to rule over the more temperate peoples of the Iranian plateau. Thus, during ʿAdud al-Dawla's short rule in Baghdad, he had to rewrite the ethnic and geographic legacy of the Daylamites. To do this, he moved the center of Daylamite power down from the mountains into the central Iranian plateau and blended Persian, Arab, Muslim, and Zoroastrian markers of cultural identity in order to claim authority to rule over an increasingly heterogeneous population. ʿAdud al-Dawla's active reconstruction of his own heritage reveals the flexible nature of medieval identity and how conversion to Islam affected these constructions of ethnicity.

Daylam and its relationship with broader Persian culture

The Buyids were Daylamites, a kin-group from the rugged mountains of northern Iran, just south of the Caspian Sea who had long served as mercenaries for various regional powers. The peoples of these regions were reputed in both Persian and Arab sources to be warlike and uncivilized. This reputation was derived from the inaccessibility of the southern Caspian: the Alborz Mountain range stretches from the modern border of Azerbaijan in the west, along the entirety of the southern coast of the Caspian Sea, and then runs northeast where it joins with the Aladagh Mountains in northeastern Iran. Mount Damavand, which is the highest mountain in the Middle East, lies in the Alborz range in the southern Caspian. Due to the isolation of this mountainous region, the southern Caspian people long held a reputation for independence, rebellion, and heresy.[2] Perhaps due to their tendency to work as mercenaries, the Daylamites were reputed to be even more 'brutish' than the other peoples of the Caspian region.

The area of the southern Caspian is made up of several mountainous regions: Daylam, Tabaristan, Gilan, and Gurgan. Today, Daylam makes up the highlands of the modern Iranian province of Gilan, which borders the modern Republic of Azerbaijan. South of the Alborz Mountains that dominate Daylam and the other southern Caspian provinces, the Iranian plateau stretches out for more than a million square miles and contains the modern nation-states of Afghanistan and Pakistan. The Iranian plateau is not flat: it contains several mountains, but the central Iranian plateau is a closed basin formed by the Alborz Mountains to the north and the Zagros Mountains to the west. The traditional homeland of the Persian people is Fars province, in southwest Iran.[3] Fars contains Persepolis, the ceremonial capital of the Achaemenid Empire (c. 550–330 BCE), which was captured and looted by Alexander the Great (d. 323 BCE).

While Daylam is technically located within the broader territory of Iran or Persia, the Daylamites were not necessarily considered Persian, according to Zoroastrian myths derived from the Gathas and the Avesta (c. 1700–1000 BCE).[4] These texts describe the world as divided into seven concentric climatic zones (Yasna 32.3).[5] Iran was located in the central and most prosperous zone, named *Xvanīrāθa* (Pahlavi: *Xwaniras*; Arabicized *Honi-rat/ X̲onāras*). These myths portrayed each region as its own circle, with the six lesser regions surrounding the central Iranian zone of *Xvanīrāθa*, separated from it by mountains, water, or forests. Daylam, where the Buyids originated, was not a part of the central Iranian zone (Yasna 32.3; Yt. 10.12–16, 67).[6] The Buyids were located in the sixth climatic zone: the cold, wet territory of the Alborz mountains (Yt. 19.1).

In this model of the world, one's place of origin and its climate determined ethnic attributes and behaviors. Broadly based on principles derived from the ancient Greek writings of Hippocrates and Galen,[7] human behavior was linked to two major categories of climate: cold (*sard*) versus hot (*garm*), and dry (*koshk*) versus humid (*martub*). The Daylamites were from a cold, wet climate and, as such, were associated with physical weakness and an absence of sexual desire.[8] However, medieval Iranians also viewed the southern Caspian region, where the Daylam was located, as hellish and infernal. The Avesta identifies the southern Caspian as "the fourteenth place" created by the Zoroastrian deity Ahura Mazda (Vendidad 1.17)[9] and it is presented as a "marginal and threatening space."[10] The mythical peoples of the southern Caspian were the peoples of Varena and Mazana; they did not descend from the same peoples who gave rise to the Iranian people. Instead, they were *an-eran* or "non-Aryan": foreign to the Iranians (Bundahishn 15.25–31).[11]

Zoroastrian creation myths portray the earth as a flat round plane that later developed mountains with long roots like plants: the Alborz mountains that dominate the homeland of the Daylamites were the first mountains.[12] The people of the Iranian plateau were suspicious of the mountain people who originated in a "strange, forbidding land where demons and strange beasts reputedly lived."[13] Mount Damavend, the highest peak in the Alborz range, is associated in Zoroastrian cosmology with Mount Tera, a mountain that supports the gateway to hell where demons can access the mortal realm.[14] Many Iranian myths are set in the Alborz mountains, usually portraying these mountains as a strange place, populated by demons. For example, in the Avesta, the hero Thraetaona binds the demon Zahak on Mount Damavand (*Bundahishn* 29.9, *Bahman Yasht* 9.14–15[15])[16] and, in the *Shahnameh*, demons haunt the Caspian forests and battle with the heroes Hushang and Rostam (Ferdowsi, 529).[17]

The pre-Islamic reputation of the Daylamites did not improve with the coming of Islam in the seventh and eighth centuries. The people of the Daylam initially resisted the Muslim conquests fiercely.[18] Compared with other Iranians, the Daylamites were late converts to Islam.[19] Further, the Daylamites had a contentious relationship with the Abbasid caliphs who

ruled much of the Middle East from 750 to 1258 CE.[20] Zoroastrian rebellions in the southern Caspian region in the ninth century led to conflict between the Zoroastrian and Muslim populations within Iran, which increased the popularity of anti-Abbasid ʿAlid leaders such as Hasan b. Zayd (d. 884 CE) within the Daylam.[21] These anti-Abbasid figures used the mountainous Daylam as a refuge, where locals and their leaders welcomed them. This fondness for anti-Abbasid proto-Shiʿi movements made the Daylam a hotbed of Shiʿi activity in the ninth century and several anti-Abbasid Shiʿi polities were founded there.[22] These Shiʿi leaders were credited with the conversion of the isolated Daylamites to Islam, which made the faith of the Daylamites deeply suspect to the Sunni elites of Abbasid Baghdad. By the early tenth century, then, when the Buyids rose to power, the Daylamite reputation had not much improved. Their negative repute from Zoroastrian cosmogony and Persian myth dovetailed with their status in Muslim history, giving them a reputation as violent mercenaries from the cold, wet territory of the Alborz Mountains, Muslim heretics (at best) from the margins of both Iran and the Islamic world. They were barely accepted as Muslims or Persians. They would need to change this if they hoped to establish their legitimacy to rule.

Daylamite takeover: ʿAdud al-Dawla and the Buyids

The Daylamites had always held a marginal position in Iranian and Persian history. But, in the tenth century, they managed to take control of both Iran and Iraq, dominating both the heartland of traditional Persia and the capital of the Sunni Muslim Abbasid caliphate (750–1258 CE).[23] The Buyid dynasty (934–1055 CE) was founded as a triumvirate of three brothers,[24] who began as mercenaries for regional polities but took over Baghdad, the capital of the Abbasid caliphate, in 945 CE. They were Shiʿi Daylamites with nominal ties to anti-Abbasid Zaydi Shiʿi[25] movements in the southern Caspian region in the ninth century. Despite this, once they conquered Baghdad, the Buyids maintained the position of the Sunni Abbasid caliph; controlling the Sunni caliphs was one of the varied ways in which they maintained authority over a heterogeneous population.[26]

ʿAdud al-Dawla (d. 983 CE) is the best known of the Buyid rulers: he came to power as the ruler of Shiraz in Fars, the cultural center of the Persian people, but sought to control Baghdad because he understood its significance as the center of the Islamic world. As a Daylamite, however, ʿAdud al-Dawla had a considerable handicap in his attempt to assume power. In order to effectively claim political power over the Persian and Arab elites who dominated the emerging Islamic society of tenth-century Baghdad, ʿAdud al-Dawla needed to revise the way the ethnic identity of the Buyid Daylamites was understood by these elites.

ʿAdud al-Dawla rewrote the ethnic identity of the Daylamites: he laid claim to both Persian and Arab heritage and shifted the geographic origins of the Daylamites from the periphery to erase the Zoroastrian cosmogony that required the Daylamites to be weak and impotent mercenaries. For example, he claimed the mantle of ancient Persian kingship by visiting Persepolis and having the ancient Persian inscriptions read to him by a Zoroastrian priest, but he left his own inscriptions at the Palace of Darius in Arabic. He built upon the Arab reputation of the Daylamites as ferocious warriors, but claimed that they were actually the remnants of a lost Arab tribe who had settled in the Daylam and intermarried with the Persian people there. ʿAdud al-Dawla countered the environmentally determined stereotypes of uncivilized mountain men with claims of a shared descent from both Arabs and Persians. In his fabrications of a new ethnic identity for the Buyid Daylamites, ʿAdud al-Dawla made himself into the model leader of a new Islamic polity that reflected the blending of ethnic identity under the canopy of Islam.

Arab. Persian. Islamic. Zoroastrian. Buyid. Daylamite.[27] ʿAdud al-Dawla claimed all of these identities. His claims do not fit neatly into the conceptual categories that are typically used to define identity in this era, revealing the flexibility of ethnic identity during this pivotal period of Islamic history. The rise of Islam profoundly affected how people of the medieval Middle East constructed concepts of ethnicity and identity. Persians thought of themselves as elites; they had long looked down upon the desert Arabs as "lizard-eaters."[28] But those Arab "lizard-eaters" led the Muslim conquest of the Middle East in the seventh and early eighth centuries. Early Islam was a predominately Arab phenomenon, but by the early eighth century, many Persians were converting to Islam. By the tenth century, the majority of the peoples of the Middle East had converted to Islam.[29]

ʿAdud al-Dawla took an active role in rewriting Buyid Daylamite identity. The original members of the Buyid triumvirate were all born in the Daylam, but ʿAdud al-Dawla was born in the central Iranian city of Isfahan in 936 CE. According to al-Miskawayh (d. 1030 CE), the chronicler who served ʿAdud al-Dawla, the amir was educated in "sound methods of administration, the way to maintain a realm, and the art of statesmanship" (Miskawayh, 2: 281–2).[30] His teacher was a polymath named Abu al-Fadl ibn al-ʿAmid (d. 970 CE),[31] whom ʿAdud al-Dawla referred to as, simply, "*al-Ustadh al-Ra'is*," the Chief Master.[32] In addition to his instruction in administration and statesmanship, ʿAdud al-Dawla would have been educated in the religious sciences (the traditions of *hadith* and *fiqh*), theology (*kalam*), and philology (*lugha*), as well as in belles-lettres (*adab*). Thus, ʿAdud al-Dawla would have been familiar with the major religious, historical, and literary works of his era in both Arabic and Persian.[33] In fact, ʿAdud al-Dawla was widely praised for his education by contemporaries (and near-contemporaries).[34] ʿAdud al-Dawla was an active participant in the crafting of his own image and legacy. He was involved in the composition of the historical chronicles about his reign: when the chronicler Abu Ishaq al-Sabi wrote a history of the Buyids, ʿAdud al-Dawla reviewed weekly drafts of his work to correct errors and add missing information (Miskawayh, 3:22–3; Yaqut I, 333).[35] But ʿAdud al-Dawla's personal achievements stood in stark contrast to the traditional stereotypes that Persians and Arabs had of the Daylamites. In order to rule, he would need to change these perceptions.

A new ethnic identity for the Daylamites

ʿAdud al-Dawla adopted the ancient Persian title of "*Shahanshah*" and claimed descent from the Sassanid Shah Bahram Gur (d. 438 CE). Thus, scholars have traditionally seen the Buyids as emphasizing their Persian roots, referring to the period of Buyid rule as the "Iranian Intermezzo."[36] But, while the Buyid rise to power did represent a resurgence of Persian control over Islamic lands, the Buyids were not one dimensional in their claims. The Daylamites were not necessarily considered 'Persian' by Persian elites; after all, they were not from the geographic territories traditionally considered part of Iran in Zoroastrian cosmogony and Persian myth. Thus, the Buyids needed to deal with the environmentally determined perceptions of their origins by creating a new identity. They did this by blending multiple ethnic identities, rewriting the origins of the Daylamites to claim both Arab and Persian ethnic descent, and shifting the seat of their authority out of the mountains of Daylam and into central Iranian heartlands.

During his reign, ʿAdud al-Dawla sponsored the historical chronicle *Kitab al-Taji* (The Book of The Crown), written by Abu Ishaq Ibrahim b. Hilal al-Sabi,[37] and closely supervised its composition. In the *Kitab al-Taji*, al-Sabi explored the origins of the Buyids. His account of the Daylamites has often been ignored as Buyid propaganda, but the ways in which it presents the Daylamites—especially in light of their reputation in tenth-century

Baghdad—reveals how the Buyids sought to rewrite their identity. In the *Kitab al-Taji*, al-Sabi did not try to shift the Buyids out of Daylam, but crafted a false Arab heritage for the Buyids. Al-Sabi created a narrative of the presence of Arabs in Daylam from ancient times, claiming that one of the original kin-groups that settled the Daylam was actually an Arab tribe named the Banu Dhabba. The Banu Dhabba were originally from Oman and al-Sabi was not the first medieval chronicler to claim that some members of the Banu Dhabba had settled in the Daylam. The Sunni chronicler al-Tabari (d. 923 CE) noted that one of the three sons of Dhabba b. Udd, the eponymous progenitor of the Banu Dhabba, had settled in the Daylam (al-Tabari, 1265–2370),[38] and al-Sabi based his claims upon al-Tabari's authority.

Building upon the existing reputation of the Daylamites as warriors and distancing the Buyids from their Daylamite heritage, al-Sabi described the Banu Dhabba as "the strongest and bravest Arabs" (al-Sabi, 12).[39] Al-Sabi also claimed that the Daylamites were a mix of Arab and Persian inhabitants of the Daylam. Thus, rather than having Daylamite origins, the Buyids could claim descent from Persian and Arab settlers in the Daylam. This new identity distanced the Buyids from the reputation of the mountain Daylamites as warlike and brutal. Al-Sabi also emphasized the closeness of Persians and Arabs in the Daylam: they were in close contact for trade, farming, and work, and they eventually intermarried and had children. Thus, after a time, al-Sabi argued, "they blended together and began to resemble each other. Today, there is no difference between them in language, characteristics, morals, or customs" (al-Sabi, 13).

In addition to blending Arab origins into Daylamite history, al-Sabi also used his narrative to further Persianize the Daylamites. While tenth-century Persian elites may not have seen the Daylamites as Persian, al-Sabi noted that the 'Arab' Daylamites eventually became highly Persianized as more Persians moved into the region (al-Sabi, 12–13). While it may seem contradictory, by claiming this Arab pedigree for the Daylamites, al-Sabi was actually able to Persianize the Buyids further. The Buyids were distanced from their Daylamite heritage and became more Persian by virtue of new ancient Arab roots.

With one narrative, al-Sabi helped ʿAdud al-Dawla lay claim to both Arab and Persian ethnic identity. These origins made them the ideal reflection of the newly developing Islamic society where Persians and Arabs were coming together under new Muslim identities. While al-Sabi never mentioned the Zoroastrian theories of climatic zones, he was clearly trying to shift the Buyids from the marginal Daylam into the idealized space of pre-Islamic Persian elites.

The Daylamites as pre-Islamic Persian kings

In Islamic history, the Buyids are most commonly known for their adoption of markers of Persian national identity: ʿAdud al-Dawla adopted the pre-Islamic Persian title of *Shahanshah*, claimed descent from the Sassanid shah Bahram Gur (d. 438 CE), and visited the ancient Persian ceremonial capital of Persepolis. Together, these claims have been interpreted as evidence of Buyid attempts to revive the pre-Islamic Persian past. However, closer examination reveals that, in each instance, the Buyids blended these claims to pre-Islamic Persian kingship with Arabo-Islamic identity. ʿAdud al-Dawla and the Buyids could not claim a prestigious royal heritage; as Shiʿi Daylamites, both their religious and ethnic origins were suspect. However, by combining pre-Islamic Persian symbols of kingship with Arabo-Islamic culture, the Daylamite Buyids were able to more closely identify with the idealized centers of Persian and Arab culture. Thus, they signaled a geographic shift in origins away from the marginal, demonic mountains of the Daylam and rewrote their ethnic identities to appeal to both Persian and Arab Muslims.

Arabizing Persian titulature: combining ancient Persian kingship with the legacy of the Arabo-Islamic conquest of Persia

ʿAdud al-Dawla adopted the pre-Islamic Persian title of *Shahanshah*. But this was not his only ceremonial title. Born Fana Khusraw, he adopted the title *al-Amir al-ʿAdil* (the Just Prince) on coins in 961–62 CE; he received the title ʿAdud al-Dawla (by which he is most commonly known) from the Abbasid caliph al-Mutiʿ (d. 974 CE) in the same year;[40] and by 965 CE, he had adopted the title of *Shahanshah*.[41] The title harkened back to the pre-Islamic Achaemenid kings of ancient Iran (c. 550–330 BCE), although it was also used by the Parthian/Arsacid (247 BCE–224 CE) and Sassanid (224–651 CE) emperors. In general, the Buyid use of this title has been seen solely as evidence of their attempt to revive ancient Persian forms of kingship.[42] While it is clear that ʿAdud al-Dawla used this title to claim the authority of pre-Islamic Persian kings, when viewed in conjunction with his other attempts to rewrite Buyid identity and his other titles, it becomes evident that ʿAdud al-Dawla used these titles to shift away from his marginal Daylamite origins and signal his new role as a bridge between Arabo-Islamic and Persian identity.

In addition to the title *Shahanshah*, ʿAdud al-Dawla also used the title "*al-Amir al-ʿAdil*" ("the Just Prince"). To a contemporary audience, this combination may have seemed to clash: the title *al-Amir al-ʿAdil* was historically associated with the second caliph ʿUmar b. al-Khattab (d. 644 CE),[43] best known in Persian history as the Arab Muslim conqueror of the Persian Sassanid dynasty. By choosing this title (and using it in conjunction with *Shahanshah*), ʿAdud al-Dawla deliberately blended religious and ethnic identities. Selecting a title that linked him with the Caliph ʿUmar further allowed ʿAdud al-Dawla to embody claims to Arab identity. The Caliph ʿUmar was known in the chronicles as both the founder of the "Arab body politic" and the quintessential Arab leader who vanquished the Sassanids.[44]

Using the Caliph ʿUmar's title allowed ʿAdud al-Dawla to represent the memory of the Muslim leader who was often depicted in the chronicles as the quintessential Arab or Bedouin, nomadic Arabs of the desert.[45] Within the Zoroastrian geography of the Avesta, Arab Bedouin are not mentioned. Before the influx of Arab Muslims into Iran, the Persians had seen the Bedouin as the worst of the Arabs: uncivilized desert "lizard-eaters."[46] But by the tenth century, when the majority of Persians had converted to Islam, ʿAdud al-Dawla could link himself with the Caliph ʿUmar's reputation as a great political leader and the founder of many of the institutions of the first Islamic state. Linking himself with the Caliph ʿUmar allowed ʿAdud al-Dawla to distance himself from his marginal Daylamite beginnings and claim the authority of the Muslim ruler most closely associated with the conquest of Iran.[47]

Choosing a title that harkened back to the memory of Caliph ʿUmar was a significant strategic choice in rewriting Buyid identity. The ninth-century Arabic chronicles emphasize the Arabism of the second caliph and his victory over the Persian Sassanid Empire. The chronicles frequently use "Arab imagery and literary expressions in . . . descriptions of Muslim battles on the Persian front," which depicted ʿUmar as the founder of the Arab-Islamic state and its champion over Persian forces.[48] The chronicles idealized the Caliph ʿUmar's relationship with the Arab Bedouin and related stories of his asceticism that featured his disapproval of Persian luxuries.[49] The motivation for these portrayals lay in a desire to romanticize the Arab ancestry of the Abbasid caliphs during an era of increasing Persian influence.[50]

Adopting a title associated with the Caliph ʿUmar also allowed ʿAdud al-Dawla both to bolster his claims to Arab identity and to symbolically position himself above the leader responsible for the Islamic conquest of Iran. Despite the fact that Persia was conquered after the death of the Caliph ʿUmar, he represented an Arabo-Islamic culture that was portrayed as having

won an epic struggle with Persian culture.[51] By using ʿUmar's title, ʿAdud al-Dawla co-opted this memory and united the Persianate and Arabo-Islamic sides of history. ʿAdud al-Dawla's continued claims of Persian and Arab ethnic identities further distanced the Buyids from their marginal Daylamite origins.

Arabizing the Persian past: ʿAdud al-Dawla's forged genealogy

In addition to adopting the title of *Shahanshah*, ʿAdud al-Dawla also claimed to be a descendant of the Sassanid Shah Bahram Gur (d. 438 CE).[52] As with his use of *Shahanshah*, this claim of Sassanid ancestry has been traditionally interpreted as a Buyid claim to Persian roots.[53] Upon closer examination, however, it becomes clear that forging a genealogical link with Bahram Gur was strategic. The Sassanid Shah Bahram Gur symbolized harmony between Arabs and Persians. He was the son of Shah Yazdgerd I (r. 399–420 CE), who sent him to be reared with the Lakhmids, independent Arab clients of the Sassanids on the border with Arabia. Bahram Gur was a popular figure in Abbasid Baghdad. The famous Muslim chronicler al-Tabari (d. 923 CE) narrated his life in great detail, relating that Bahram Gur was raised at the court of Mundhir b. Nuʿman (r. 580–602 CE), the Lakhmid king of Hira.[54] There, three nurses suckled Bahram Gur: two Arabs, and one Persian. When Yazdgerd died, Bahram's older brother (and the heir) was assassinated and a pretender put on the throne. Bahram Gur, however, returned to the Sassanid capital of Ctesiphon with an Arab army and forced the pretender to abdicate.[55] Thus, Bahram Gur symbolized Persian-Arab cooperation in the pre-Islamic era. Al-Tabari considered the participation of both Arabs and Persians in raising Bahram Gur to be a sign of both nations' contribution to his greatness. When Mundhir b. Nuʿman helped Bahram Gur win back his throne, al-Tabari presented this aid as an act of unselfish assistance that was rewarded when Islamic forces won control over Persia.[56] Claiming Bahram Gur as his ancestor allowed ʿAdud al-Dawla to further distance himself from his Daylamite origins and to position himself as the figure who brought together the Arab and Persian traditions.

Arabizing Persian kingship: ʿAdud al-Dawla's visit to Persepolis

The Achaemenid shah Darius the Great (r. 522–486 BCE) began construction of a ceremonial capital at Persepolis,[57] which later became the symbolic seat of the pre-Islamic Zoroastrian concept of Persian kingship.[58] In 954 CE, ʿAdud al-Dawla visited the Palace of Darius at Persepolis and had the inscriptions there read to him by a Zoroastrian priest. Before he departed, ʿAdud al-Dawla left his own inscriptions at the site that noted his visit and a recent military victory.[59] ʿAdud al-Dawla's visit to Persepolis has traditionally been interpreted as a sign of Buyid "interest in their Iranian roots."[60] While ʿAdud al-Dawla was clearly trying to embody the authority of the Achaemenid or Sassanid shahs,[61] two significant details have been ignored. First, ʿAdud al-Dawla left his own inscriptions at Persepolis in Kufic Arabic, not in Persian. Second, as a Daylamite, claiming ownership over the symbolic heart of the Persian tradition at Persepolis allowed ʿAdud al-Dawla to shift the Buyids completely out of the marginal zone of the mountainous Daylam into the central heartlands of Iran. ʿAdud al-Dawla's visit to Persepolis cannot merely be attributed to his interest in the Persian past; it must be read as a clear effort to rewrite his own Daylamite origins and blend the Persian and Arabic past.

ʿAdud al-Dawla was, of course, educated in Arabic. But he was among the first generation of Buyid leaders to speak Arabic—his father and two uncles did not. Leaving these Arabic

inscriptions at Persepolis, where the commemoration of military victories had been common in Sassanid and Achaemenid times, suggests a deliberate choice about how ʿAdud al-Dawla wanted to portray his own power in a rapidly changing Islamic society. It also marks an attempt to change the peripheral status of the Daylamites by asserting themselves and their authority within the central climatic zone. This move from periphery to center meant moving their place of origin and seat of power from the mountainous, wet, and cold land of demons to the perfectly balanced ideal zone that had imbued the earlier Zoroastrian kings with the proper ethnic character for rule. Further, with these inscriptions, ʿAdud al-Dawla stressed the continuity of his rule not only with the Persian Sassanid dynasty, but also with the Arabo-Islamic Abbasid caliphs, who modeled their own symbolic claims to kingship on pre-Islamic Sassanid rituals.[62] He affirmed his own place in the continuum of historical rule between the pre-Islamic and the Islamic and brought these two traditions together by emphasizing his Sassanid roots in an Arabo-Islamic form.

Conclusion

ʿAdud al-Dawla embodied the spirit of a tenth-century Islamic world that was only just becoming predominately Muslim and grappling with an influx of converts with a motley assortment of pre-Islamic identities. As a Daylamite, he had to counter existing perceptions of his origins that linked him with the isolated, chaotic mountains of the Daylam. But ʿAdud al-Dawla was also a second-generation Muslim who was educated by the skilled Persian and Arab advisors of his father and uncle. ʿAdud al-Dawla would have known the Zoroastrian traditions marginalizing the Daylam and castigating the Arabs as "lizard-eaters." But, as a Muslim, he would also have been aware of how, as more non-Arabs converted to Islam, these pre-Islamic ethnic identities were brought together under the umbrella of Islam. Thus, ʿAdud al-Dawla's opportunistic attempts to reconstruct his own ethnic heritage and that of his Daylamite ancestors reveals the fluidity of ethnic identity during this era when the Middle East was becoming predominately Muslim for the first time.

The Buyids are often considered part of a larger Persian cultural resurgence in medieval Islamic history. But labeling them 'Persian' ignores how the Buyids had to overcome their primary Daylamite identity to assert their legitimacy over a heterogeneous population of Muslims. Persian elites did not see the Daylamites as Persian but as marginal, uncivilized, and a threat to Iran. To be successful, Buyid appeals to authority needed to rewrite their ethnic and geographic origins. They did not fit neatly into categories of 'Persian' identity. In order to erase concepts of the Daylamites as marginal and dangerous, the Buyids successfully blended tropes from pre-Islamic Persian kingship with Arabo-Islamic history to make themselves a new identity that could appeal to the widest possible audience. The success of the Buyids in making these hybrid claims to authority reveals the flexibility of Islamic identity as converts to Islam adapted to their new faith and shows how pre-Islamic identities were blended and rewritten under the banner of Islam.

Notes

1 ʿAdud al-Dawla was not the first Buyid prince to enter Baghdad, nor the first to use the title *Amir al-Umara*. Baghdad had been conquered by his uncle, Muʿizz al-Dawla, in 945 CE. ʿAdud al-Dawla was crowned the amir of Baghdad once before, in 975 CE, but infighting within the Buyid family had forced him to abdicate in favor of Muʿizz al-Dawla's son after less than three months. The use of the title *Amir al-Umara*, 'prince of princes' dates to the earlier tenth century and does not appear to be linked with the Achaemenid concept of the 'king of kings.' The title may be inspired by the concept

of the 'king of kings,' but this grammatical pattern is fairly common in Arabic and there is no direct evidence of a relationship.

2 This region was often used as a refuge for heterodox movements. In addition, many rebellions against the Abbasids (and earlier pre-Islamic rulers in Iran) began in the Caspian region (in fact, the Abbasid rebellion itself—against the 'Umayyads of Syria—began in Khurasan, a region adjacent to the Caspian. For a detailed discussion of the heterodox movements popular in the Caspian, see Crone 2012.

3 The term "Persian" comes from the ancient name of Fars province, "Parsa." The term "Fars" is the Arabized version of "Pars," because Arabic does not have the phoneme "p."

4 The Avesta is the sacred book of Zoroastrianism (and Avestan is the language of its composition). The Gathas are 17 hymns in a much older eastern Iranian language, thought to date back to the life of Zoroaster. However, scholars do not agree on when Zoroaster lived. The traditional date for Zoroaster's life was c. 600 BCE. However, linguists have concluded that the language of the Avesta is older and date it to 1500–1200 BCE. Because there is no clear evidence dating the Prophet Zoroaster, most scholars place his lifetime broadly within the timeframe of 1700 to 1000 BCE. Due to the difficulty in dating the lifetime of the Prophet Zoroaster and insufficient knowledge of how the Avesta and the Gathas were passed down over time, it is equally difficult to date conclusively the origin of these texts. There is an excellent summary of the issues of dating the Prophet Zoroaster and Zoroastrian texts in Settegast 2005, 53–4.

5 *Avesta: Yasna,* In *Sacred Liturgy and Gathas/Hymns of Zarathustra*: *Sacred Books of the East.* 1898. Translated by L.H. Mills. Oxford University Press.

6 *Yasht.* In *The Zend-Avesta, part II*: *Sacred Books of the East.* 1882. Translated by James Darmesteter. Oxford University Press. For a detailed discussion of Zoroastrian cosmology, see Boyce 1975, 133–4 and Nasr 1996, 10–27.

7 Bromberger 2013. On Hippocrates, see Kennedy and Irby, this volume.

8 Bromberger 2013.

9 *Vendidad,* In *The Zend-Avesta*: *Sacred Books of the East.* 1880. Translated by James Darmesteter. Oxford University Press.

10 Bromberger 2013.

11 *Bundahishn* 2002. Translated by Behramgore Tehmuras Anklesaria and edited by Joseph H. Peterson. Online edition available from www.avesta.org.

12 Boyce 1975, 133.

13 Frye 1963; 1996; 1975, 8.

14 Hinnells 1973, 27 and Cohn 1993, 108.

15 *Bahman Yasht*, In *Pahlavi Texts*: *Sacred Books of the East.* 1880. Translated by E.W. West. Oxford University Press.

16 Hinnells 1973, 43 and 68–9.

17 Abu al-Qasim Ferdowsi, *Shahnameh*. 1976. Edited by Jules Mohl. Paris.

18 Madelung 1975, 198 and 200–202.

19 Choksy 1997, 91.

20 Choksy 1997, 22–3.

21 Choksy 1997, 40–41.

22 The Zaydi movements in the Caspian provinces proved particularly successful. In the ninth century, several Zaydi dynasties claiming to be descendants of the Prophet Muhammad through ʿAli b. Abi Talib and Fatima ruled parts of Tabaristan. The most significant of these Zaydi dynasties was led by Hasan b. Zayd (d. 884 CE), who was known by the title "al-Daʿi ila al-Haqq," which means "the one who calls to the truth." He founded his dynasty in opposition to the Sunni Abbasid caliph. By 865 CE, the Zaydi movement directed by al-Daʿi ila al-Haqq controlled most of Tabaristan and expanded into central Iran. By the late ninth century, supporters of the Zaydis of Tabaristan had penetrated deep into Daylam and Gilan and were expanding: in 896, they conquered Nishapur briefly. By 900 CE, they were attempting to conquer Khurasan. Ultimately, the Sunni Samanids (819–999 CE), an independent dynasty that paid nominal allegiance to the Abbasids, stopped this expansion.

A second significant Zaydi movement in the Caspian was founded by an individual known as Hasan b. ʿAli al-Utrush, who had been a supporter of al-Daʿi ila al-Haqq and his successor. Al-Utrush won large portions of the Caspian back from Sunni Abbasid vassals and was a popular ruler—even al-Tabari, the famed Sunni Abbasid chronicler, who was born in a town ruled by al-Utrush's descendants, related in his history that "the people had never seen anything like al-Utrush's justice, his exemplary way of life, and the way he established truth."

23 Fully defining the difference between Sunni and Shiʿi Islam is far beyond the scope of this chapter. The heart of the difference between Sunnis and Shiʿis, however, comes down to a disagreement over who had the right to rule the Muslim community after the death of the Prophet Muhammad in 632 CE. Sunnis supported the decision of the Muslim community, that the Prophet's companion and friend, Abu Bakr (d. 634 CE), should rule. Shiʿis, however, believed that leadership should have remained within the family of the Prophet Muhammad and they supported the candidacy of the Prophet's cousin and son-in-law, ʿAli ibn Abi Talib (d. 661). Over time, Shiʿis came to believe that a specific line of descendants from ʿAli and the Prophet's daughter Fatima (d. 632 CE)—which Shiʿis call Imams—had special knowledge and insight for leading the Muslim community. In the tenth century, when the Buyids were rising to power, most of these beliefs were still in the process of developing. There was a particular animosity, however, between eighth- and ninth-century Shiʿi groups and the Abbasid caliphs because many Shiʿis felt that the Abbasids had used Shiʿi sympathies to come to power in 750 CE, but then betrayed the Shiʿis by not appointing a descendant of ʿAli and Fatima to the caliphate.

24 ʿImad al-Dawla (d. 949 CE), Rukn al-Dawla (d. 976 CE), and Muʿizz al-Dawla (d. 967 CE). These are their regnal names, by which they are best known. ʿImad al-Dawla was the eldest brother and the senior member of the triumvirate. He ruled from Shiraz while Rukn al-Dawla, the second-oldest brother, ruled from Rayy, and Muʿizz al-Dawla, the youngest, conquered Baghdad, the seat of the Sunni Abbasid caliphate.

25 Zaydi Shiʿism, also known as "Fiver" Shiʿism, is derived from Zayd b. ʿAli (d. 740 CE), the grandson of the third Imam, Husayn b. ʿAli (d. 680 CE). For more information on the Zaydis, see Halm 2004, 202–6. The Buyids were Zaydi Shiʿis originally, but after conquering Baghdad they converted to *Ithnaʿashari* or Imami Shiʿism (also known as "Twelver" Shiʿism), which was the predominant form of Shiʿism in Baghdad in the tenth century. The *Ithnaʿashari*s follow a specific line of twelve Imams originating with ʿAli b. Abi Talib and ending with Muhammad ibn al-Hasan al-Mahdi (b. 869 CE), who they believe went into hiding to avoid persecution from the Abbasids. For more information about the *Ithnaʿashari*s, see Halm 2004, 28–38.

26 The relationship between the Abbasid caliphs and the Buyid amirs was complex and not static. For more details, see Hanne 2007.

27 ʿAdud al-Dawla also combined both Sunni and Shiʿi cultural and religious idioms in his own attempt to articulate his right to rule. While these aspects of medieval Islamic identity are significant, they will not be addressed at length in this article.

28 While urban Persians often referred to the desert Arabs as "lizard-eaters," this slur was particularly popular during the *Shuʿubiyya* movement in ninth- and tenth-century Iran. See Irwin 2000. The tenth-century Iranian poet Ferdowsi also famously referred to the Arabs as those who had arisen "from a diet of camel's milk and lizards," Ferdowsi 1990, 415.

29 Richard Bulliet made this argument. While his thesis is speculative, it has been largely accepted within the field. He discusses his methodology in detail in Bulliet 1979, 64–79.

30 Ahmad ibn Muhammad Miskawaihi. *The Concluding Portion of the Experiences of Nations.* 1921. Translated and edited by D.S. Margoliouth. London: Basil Blackwell, Broad Street.

31 Abu al-Fadl b. al-ʿAmid was from Qum, a Shiʿi center. His grandfather had worked in the market, but Ibn al-ʿAmid's father had joined the secretarial class—he served as a vizier for several different Daylamite leaders (Washmgir b. Ziyar, Mardawij al-Jili, and Makan b. Kaki) before serving the Samanids in Khurasan. It was the Samanids who gave him the honorarium "al-ʿAmid," which meant "the reliable." Ibn al-ʿAmid served Rukn al-Dawla for 32 years. He was known as "the second Jahiz," due to his skill as a epistolary writer. Al-Thaʿalibi wrote that Ibn al-ʿAmid was keenly interested in philosophy and sciences and read extensively from the works of Plato, Socrates, and Aristotle. He was also educated in the Arab religious sciences and, although he tended more towards politics, ethics, mathematics, and engineering, his Qur'anic exegesis and knowledge of different recitations of the Qur'an were renowned. He was particularly famous for his memorization of the *diwan*s (collections) of famous poets of both the *Jahiliyya*, the era before Islam, and the Islamic age. Ibn al-ʿAmid was killed during an expedition to the Jabal in an attempt to pacify a Kurdish leader there. For an extensive discussion of Ibn al-ʿAmid's biography and reputation, see Kraemer 1986a, 241–55.

32 Ibn al-ʿAmid once, in a letter to ʿAdud al-Dawla, referred to him as "the sublime amir" due to his education in the arts and sciences.

33 For an extensive discussion of *majalis* and education in the tenth-century Buyid world, see Kraemer 1986a, 55–8.

34 See Kraemer 1986b.

35 Ibn ʿAbd Allah al-Hamawi Yaʿqut, *Irshad al-Arib ila maʿrifat al-adib*. Vol. 1. 1923–31. Edited by D.S. Margoliouth. London. M.S. Khan has a detailed discussion of the composition of the *Kitab al-Taji* in Khan 1965 and Madelung discusses ʿAdud al-Dawla's role in the composition of the *Kitab al-Taji* in Madelung 1967.

36 Vladimir Minorsky coined the term "Iranian Intermezzo" to describe this period, which also included the rise of other Iranian Muslim dynasties (in addition to the Buyids) such as the Tahirids (821–73 CE), Saffarids (861–1003 CE), and the Samanids (819–999 CE). See Minorsky 1953. Within Iranian history overall, there has often been a nationalist conflation of Iranian and Persian history and, as a part of this, an attempt to see the Buyids as part of a continuous line of Persian-Iranian leadership that can be traced from the ancient Achaemenid king Cyrus the Great (r. 559–30 BCE) through to the modern state of Iran. Most recently, Reza Shah Pahlavi (r. 1925–41 CE), whose dynasty was overthrown by the Iranian Revolution in 1979 CE, tried to emphasize this link by choosing the regnal name "Pahlavi," the name of the script used to write Persian in pre-Islamic times. Further, his son and successor, Muhammad Reza Shah Pahlavi (r. 1941–79 CE) had a gala at the ancient site of Persepolis from October 12–6, 1971 CE to celebrate the 2,500 years of continuous Iranian monarchy dating from Cyrus the Great to his own rule.

Within the historiography of the Buyid dynasty, this tendency to view the Buyids predominantly as a Persian, Shiʿi state continues. Wilfred Madelung refers to the Buyids as the "resurgence of the Persian national consciousness" in Madelung 1969, 84. H. Busse repeatedly focuses on the Iranian nature of Buyid rule, saying, for example, that the conquest of the Buyids led to the Islamic world being "united under the rule of an Iranian dynasty": Busse 1975, 250. Joel L. Kraemer, citing Busse, also refers to the Buyids as presiding "over the rebirth of an Iranian political ideology" in *Kraemer* 1986a, 36. These kinds of analyses are not limited to the Buyids, of course; other Persianate dynasties receive similar treatment, such as the Tahirids, which C.E. Bosworth refers to as the "beginnings of a resurgence of a Persian national feeling and culture," in Bosworth 1975, 90. Furthermore, these more nationalist readings of Buyid history have predominately focused on the Buyid use of Persianate symbols to claim authority, concentrating especially on questions of when and where the title of *Shahanshah* was revived.

37 Al-Sabi, 12–13. All translations from al-Sabi's *Kitab al-Taji* are my own.

38 Abu Jaʿfar Muhammad ibn Jarir al-Tabari*, Tarikh al-rusul wa-al-muluk*. Misr: Dar al-Ma'arif, 1990–2006.

39 Abu Ishaq al-Sabi, Abu Ishaq, *Muntazaʿ min Kitab al-Taji fir akhbar al-Dawla al-Daylamiyya*. 1987. In *Arabic Texts Concerning the History of the Zaydi Imams of Tabaristan, Daylaman, and Gilan*, collected and edited by Wilferd Madelung. Beirut.

40 The Buyid use of the title *Shahanshah* has been discussed at length by scholars. For many of the petty dynasties of Iran, the Abbasid caliph was the source of important honors and titles, which were often given in return for presents of money and luxury items. It has been argued that the sheer number of titles granted by the caliph during the tenth century "cheapened" the position of the caliph: Bosworth 1962, 213.

41 There has been much scholarly debate over which was the first group to revive the title *Shahanshah*, which of the early Buyids claimed the title, and when ʿAdud al-Dawla adopted the title. H.F. Amedroz, who was one of the first scholars to write about the Buyids in English, used numismatic evidence to date the first use of the title "*Shahanshah*" to Musharrif al-Dawla (r. 1021–25 CE); Vladimir Minorski argued that it was Baha al-Dawla (ʿAdud al-Dawla's son, r. 998–1012 CE) who was the first to take the title, while G.C. Miles argued that Fakhr al-Dawla (r. 976–80 CE and 984–97 CE) was to first (in 983–4 CE). Adam Mez was the first to argue that ʿAdud al-Dawla was the first to claim the title.

Most of these arguments are from nearly a century ago and are based on numismatic evidence. Mafizullah Kabir argued that the Buyids, and ʿAdud al-Dawla in particular, were the first to claim the title; he based this on the use of the title in fragments of the *Kitab al-Taji*, Ibn al-Jawzi's later use of the title, numismatic evidence, and al-Mutanabbi's use of the title in a poem dedicated to ʿAdud al-Dawla from 965 CE. Because of al-Mutanabbi's use of the title in 965 CE, Kabir argued that it was then, while he was the ruler of Shiraz, that ʿAdud al-Dawla formally adopted the title, although the Abbasid caliph had probably not invested him with the title (if the Abbasid caliph could ever invest someone with the title of *Shahanshah*). Miles later revised his earlier argument based on new numismatic sources portraying Rukn al-Dawla as the first to claim the title *Shahanshah* on a coin issued in 962 CE, where he was shown as a king with a crown and an inscription in Pahlavi calling

him *Shahanshah*. Wilferd Madelung was the first scholar to deal with the other Persian groups of the tenth century who used the title *Shahanshah*. As mentioned above, Mardawij b. Ziyar, the founder of the Ziyarids, claimed the title in 934 CE.

Madelung also convincingly argued that it was ʿImad al-Dawla, the founder of the Buyid dynasty, who was the first to use the title *Shahanshah*. This claim was only mentioned in one source, al-Nuwayri's *Nihayat al-Arab*, which was written in the fourteenth century. Madelung, however, argued that, despite the lack of epigraphical or numismatic evidence to support it, this claim is credible because Nuwayri's main source for Buyid history was the now lost *Tarʿikh al-Duwwal al-Munqatiʿa* by Ibn Zafir, which, in turn, relied heavily on Abu Ishaq al-Sabi's *Kitab al-Taji*, which was sponsored by ʿAdud al-Dawla. Only fragments remain from the *Kitab al-Taji*, but Madelung argued that ʿAdud al-Dawla would have had a political interest in claiming that the title *Shahanshah* had been first adopted by his uncle, ʿImad al-Dawla, since ʿAdud al-Dawla was his appointed heir. ʿImad al-Dawla's use of the title would legitimize ʿAdud al-Dawla's claim to the title.

42 Busse 1977, 62 said this title was selected because "justice was a much praised virtue of the Persian kings." And Kraemer 1986a, 45, attributed it to "justice being a highly acclaimed virtue of the Iranian monarch." On Achaemenid kingship, see Kurht 1984 and Root 1979.

43 The ninth-century historical chronicles, such as those by Ibn Saʿd (d. 845), Baladhuri (d. c. 892), and al-Tabari (d. 923), all referred to the second caliph, ʿUmar b. al-Khattab, by the title "al-Sultan al-ʿAdil": El-Hibri 2010, 77, 83, and 89.

44 El-Hibri 2010, 84.

45 El-Hibri 2010, 87.

46 Bromberger 2011.

47 El-Hibri 2010, 78.

48 El-Hibri 2010, 84.

49 El-Hibri 2010, 84–5.

50 El-Hibri 2010, 87.

51 El-Hibri 2010, 84.

52 The Buyids were not the first to manufacture genealogies to legitimize their authority. The Tahirids claimed descent from the Arab tribe of Khuzaʿa and created a Persian genealogy linking them to the hero Rustam; the Saffarids claimed descent from the Sassanid king Khusraw II to Faridun and Jamshid; and the Samanids claimed to be related to the general Bahram Chubin. Later, the Ghaznavids claimed descent from a daughter of Yazdigirid III, the last Sassanid shah.

53 For example, Busse argued that ʿAdud al-Dawla selected Bahram Gur as his descendant because of his association with lions. Both ʿAdud al-Dawla and Bahram Gur had legends about lions associated with them. The *Shahnameh* related that Bahram Gur finally won the leadership of the Sassanids after defeating two lions who guarded the royal crown and robe, while ʿAdud al-Dawla's Daylamite clan was called "*Shirdil Awandan*"—"*Shirdil*" meant "Lionheart" and ʿAdud al-Dawla named his oldest son Shirdil: Busse 1977, 61.

54 From c. 300 to c. 600 CE, Hira was the capital of the Lakhmid tribe. It is located three kilometers south of Kufa. The Lakhmids were semi-independent clients of the Sassanids. Mundhir is said to have ruled c. 418–52 CE. For more information, see "Lakhmids," *EOI2*.

55 For more information on Yazdgerd, see Daryaee 2008, 58–67.

56 Busse 1977, 54–6, discusses how the Abbasids used Persian motifs to argue that "Islam was the national destination of the Persian nation." His interest, however, is focused predominantly on how ʿAdud al-Dawla adopted some motifs of Persian kingship and how to interpret whether or not the Buyids legitimately saw themselves as actually descendants of the Sassanids. For example, Busse writes, "We may proceed from the assumption that he was convinced of the reality of his Sassanid descent, and certainly to no less a degree than the Prophet Muhammad was convinced of the truth of his divine mission": Busse 1977, 58.

57 On Persepolis, see, for example, Mousavi 2002.

58 ʿAdud al-Dawla was not the only Persian ruler who sought to use the pre-Islamic Zoroastrian past to bolster his own legitimacy. Persepolis was the site of the celebration thrown by the twentieth-century Iranian leader, Muhammad Reza Shah Pahlavi (r. 1941–79 CE), to celebrate 2,500 years of Persian monarchy.

59 These inscriptions were photographed and published in Donohue 1973.

60 Donohue 1973, 77.

61 Visiting the palaces and monuments associated with ancient Persian kings allowed him to acquire the royal glory of those kings. Royal glory, or *farr*, was a special quality possessed by Persian kings that originally meant "life force" or "splendor" and, over time, came to mean "victory" and "fortune." *Farr* was the Zoroastrian concept of "royal glory." In the Avesta, *farr* is a magic force often depicted as fire or descending from the heavens. It was considered both a guarantee and a sign of success. During the Hellenistic period, *farr* became more closely associated with royal fortune and became the symbolic source of legitimacy for Iranian rulers. It was believed to originate from Ahura Mazda and then to have been transferred over time from the god to the Sassanids. This divine lineage gave the Sassanid king omnipotent powers and absolute authority over the world. For more information, see "*Farr(ah)*" in the *Encylopaedia Iranica* and Choksy 1988.

62 While Abbasid claims to authority were grounded in Islamic doctrines, they adopted aspects of Sassanid rituals to articulate their own legitimacy. For example, the language and ritual of Sunni Abbasid accession oaths recalled the rhetoric used in the accession of Sassanid kings. Furthermore, Baghdad, constructed as the Abbasid imperial capital in 762 CE, was built on a round plan and oriented to the points of the compass. The city itself "was an architectural expression of legitimate Islamic world rule in Iranian style," that harkened back to the palace cities of the first Sassanids. Marsham 2009 demonstrated the Sassanid and Byzantine roots of many of the rituals of kingship in the Abbasid state and Al-Azmeh 1997 argued that the symbols of authority that are considered to be 'classically Islamic' are actually "highly elaborate reworkings" of earlier traditions that took place over centuries.

Bibliography

Amedroz, Henry Frederick. 1901. "Three Years of Buwaihid Rule in Baghdad, A.H. 389–393." *Journal of the Royal Asiatic Society of Great Britain and Ireland* 37: 501–36.

——. 1905. "The Assumption of the Title Shahanshah by Buwayhid Rulers." *Numismatic Chronicle* 4(5): 393–9.

Al-Azmeh, Aziz. 1997. *Muslim Kingship: Power and the Sacred in Muslim, Christian, and Pagan Polities*. London: I.B. Tauris.

Bearman, P.J., Bianquis, Th., Bosworth, C.E., van Donzel, E., Heinrichs, W.P., *et al.* 1960–2005. *Encyclopaedia of Islam*, 2nd edn. Leiden: E.J. Brill.

Boyce, Mary. 1975. *A History of Zoroastrianism*, *vol. I: The Early Period*. Leiden: Brill.

Bosworth, C.E. 1962. "The Titulature of the Early Ghaznavids." *Oriens* 15: 210–33.

——. 1970. "Dailamis in Central Iran: the Kakuyids of Jibal and Yazd." *Iran* 8: 73–95.

——. 1973. "The Heritage of Rulership in Early Islamic Iran and the Search for Dynastic Connections with the Past." *Iran: Journal of the British Institute of Persian Studies* 11: 51–62.

——. 1975. "The Tahirids and Saffarids." In *The Cambridge History of Iran, Volume 4: From the Arab Invasion to the Saljuqs*, edited by R.N. Frye, 90–135. Cambridge: Cambridge University Press.

Bromberger, Christian. 2011. "Gilan: Popular and Literary Perceptions of Identity." In *Encyclopedia Iranica*, edited by Ehsan Yarshater. New York: Columbia University, Center for Iranian Studies.

——. 2013. *Un autre Iran: Un ethnologue au Gilan*. Paris: Armand Colin.

Bulliet, Richard. 1979. *Conversion to Islam in the Medieval Period: An Essay in Quantitative History*. Cambridge, MA: Harvard University Press.

Busse, Heribert. 1975. "Iran under the Buyids." In *The Cambridge History of Iran, Volume 4: The Period from the Arab Invasion to the Saljuqs*, edited by R.N. Frye, 250–304. Cambridge: Cambridge University Press.

——. 1977. "The Revival of Persian Kingship under the Buyids." In *Islamic Civilization 950–1150*, edited by D.S. Richards, 47–69. Oxford: Bruno Cassirer, Ltd.

Choksy, Jamsheed. 1988. "Sacral Kingship in Sasanian Iran." *Bulletin of the Asia Institute* 2: 35–53.

——. 1997. *Conflict and Cooperation: Zoroastrian Subalterns and Muslim Elites in Medieval Iranian Society*. New York: Columbia University Press.

Cohn, Norman. 1993. *Cosmos, Chaos, and the World to Come: The Ancient Roots of Apocalyptic Faith*. New Haven, CT: Yale University Press.

Crone, Patricia. 2012. *The Nativist Prophets of Early Islamic Iran: Rural Revolt and Local Zoroastrianism*. Cambridge: Cambridge University Press.

Curtis, Vesta Sarkhosh. 1993. *Persian Myths*. Austin: University of Texas Press.

Daryaee, Touraj. 2008. *Sasanian Iran (224–651 CE): Portrait of a Late Antique Empire.* Costa Mesa, CA: Mazda Publishers.
Donohue, John J. 1973. "Three Buwayhid Inscriptions" *Arabica* 20(1): 74–80.
——. 2003. *The Buwayhid Dynasty in Iraq 334 H./945 to 403 H./1012: Shaping Institutions for the Future.* Leiden: Brill.
Ferdowsi, Abu al-Qasim. 1990. *Shahnameh*, edited by Djamal Khaleghi-Motlagh. Winona Lake, IN: Eisenbrauns.
Frye, Richard N. 1963. *The Heritage of Persia: The Pre-Islamic History of One of the World's Great Civilizations.* New York: World Publishing Company.
——. 1996 (1975). *The Golden Age of Persia: The Arabs in the East.* New York: Barnes and Noble Books.
——. ed. 1975. *The Cambridge History of Iran, Volume 4: From the Arab Invasion to the Saljuqs*. Cambridge: Cambridge University Press.
Geertz, Clifford. 1983. "Centers, Kings, and Charisma: Reflections on the Symbolics of Power." In *Local Knowledge: Further Essays in Interpretive Anthropology*, 121–46. New York: Basic Books.
Halm, Heinz. 1991. *Shiism*. Edinburgh: Edinburgh University Press.
Hanne, Eric J. 2007. *Putting the Caliph in His Place: Power, Authority, and the Late Abbasid Caliphate*. Madison, NJ: Fairleigh Dickinson University Press.
El-Hibri, Tayeb. 2010. *Parable and Politics in Early Islamic History: The Rashidun Caliphs*. New York: Columbia University Press.
Hinnells, John R. 1973. *Persian Mythology*. London: Hamlyn Publishing.
Irwin, Robert. 2000. *Night and Horses and the Desert: An Anthology of Classical Arabic Literature*. Woodstock, NY: The Overlook Press.
Kabir, Mafizullah. 1959. "The Assumption of the Title of Shahanshah by the Buwayhid Rulers." *Journal of the Asiatic Society of Pakistan* 4:41–8.
——. 1964. *The Buwayhid Dynasty of Baghdad, 334/946–447/1055.* Calcutta: Iran Society.
Khan, M.S. 1965. "A Manuscript of an Epitome of al-Sabi's Kitab al-Tagi." *Arabica*, 12(1): 27–44.
——. 1968/1969. "Miskawayh and the Buwayhids." *Oriens* 21/22: 235–47.
——. 1969. "Miskawaih and Arabic Historiography." *Journal of the American Oriental Society* 89: 710–30.
——. 1980. *Studies in Miskawayh's Contemporary History (340–369 AH).* Chicago, IL: Published for CMES at the University of Chicago by University Microfilms International.
——. 2003. "The Early History of Zaydi Shiʿism in Daylaman and Gilan." In *Shiʿism*, edited by Etan Kohlberg, 221–34. Burlington, VT: Ashgate Variorum.
Kraemer, Joel L. 1986a. *Humanism in the Renaissance of Islam: The Cultural Revival During the Buyid Age.* Leiden: E.J. Brill.
——. 1986b. *Philosophy in the Renaissance of Islam: Abu Sulayman al-Sijistani and His Circle.* Leiden: Brill.
Kurht, Amelie. 1984 "The Achaemenid Concept of Kingship." *Iran* 22: 156–60.
Levy, Reuben. trans. 1990. *Shah-nama, the Epic of the Kings*. London: Arkana.
Madelung, Wilferd. 1967. "Abu Ishaq al-Sabi and the ʿAlids of Tabaristan and Gilan." *Journal of Near Eastern Studies* 26(1): 17–57.
——. 1969. "The Assumption of the Title Shahanshah by the Buyids and the Reign of the Daylam." *Journal of Near Eastern Studies* 28(2): 84–108.
——. 1970. "Further Notes on al-Sabi's Kitab al-Taji." *Islamic Studies* 9(1): 81–8.
——. 1975. "The Minor Dynasties of Northern Iran." In *The Cambridge History of Iran, Volume 4: From the Arab Invasion to the Saljuqs*, edited by R.N. Frye, 90–135. Cambridge: Cambridge University Press.
Marsham, Andrew. 2009. *Rituals of Islamic Monarchy: Accession and Succession in the First Muslim Empire.* Edinburgh: Edinburgh University Press.
Mez, Adam. 1937 (1979). *Renaissance des Islams*. Translated by Salahuddin Khuda Bakhsh and D.S. Margoliouth. Delhi: Idarah-i Adabiyat-i Delli.
Minorsky, Vladimir. 1932. "La domination des Dailamites." *Publications de la Société des Études Iraniennes et de l'Art Person.* 3: 1–28.
——. 1953. "The Iranian Intermezzo." In *Studies in Caucasian History*. London: Taylor's Foreign Press.
Moin, A. Azfar. 2012. *The Millennial Sovereign: Sacred Kingship and Sainthood in Islam.* New York: Columbia University Press.

Mousavi, Ali. 2002. "Persepolis in Retrospect: Histories of Discovery and Archaeological Exploration at the Ruins of Ancient Parseh." *Ars Orientalis* 32: 209–51.

Nasr, Seyyed Hossein. 1996. "Cosmography in Pre-Islamic and Islamic Persia: The Question of Continuity of Iranian Culture." In *The Islamic Intellectual Tradition in Persia*, edited by Mehdi Amin Razavi Aminrazavi, 10–27. Richmond: Curzon Press.

Remensnyder, Amy G. 1996. *Remembering Kings Past: Monastic Foundation Legends in Medieval Southern France*. Ithaca, NY: Cornell University Press.

Root, Margaret. C. 1979. *The King and Kingship in Achaemenid Art*. Leiden: Diffusion, Brill.

Rowson, Everett. K. 1998. "Abu Ishaq Ibrahim ibn Hilal al-Sabi." In *Encylopedia of Arabic Literature*, vol. 2, edited by Julie Scott Meisami and Paul Starkey, 671–2. London: Routledge.

Settegast, Mary. 2005. *When Zarathustra Spoke: The Reformation of Neolithic Culture and Religion.* Costa Mesa, CA: Mazda Publishers.

Treadwell, Luke. 2001. *Buyid Coinage: a Die Corpus (322–445 A.H.)*. Oxford: Ashmolean Museum.

——. 2003. "Shahanshah and al-Malik al-Muʿayyad: The Legitimation of Power in Samanid and Buyid Iran." In *Culture and Memory in Medieval Islam: Essays in Honour of Wilferd Madelung*, edited by Farhad Daftary and Josef W. Meri, 318–37. London: I.B. Tauris.

Yarshater, Ehsan, ed. 1996–. *Encyclopædia Iranica*, online edition. New York: www.iranicaonline.org.

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PART III

Mapping ethnicity

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17

LOCATION AND DISLOCATION IN EARLY GREEK GEOGRAPHY AND ETHNOGRAPHY

Philip Kaplan

Είμαστε όλοι μετανάστες (graffito on a wall in Ayia Paraskevi, Athens, July 2014)[1]

Introduction

In a well-known passage in his *Archaeology*, the Greek historian Thucydides provides an assessment of early Greek history in which he describes most of its early inhabitants as migratory (*metanastaseis*), living off of subsistence farming and being readily willing to change homes (1.2). This was true of most of Greece, except for Arkadia: he notes Thessaly and Boeotia as prime examples. He goes on, however, to make a perversely ethnocentric claim about Athens: by virtue of the poverty of its soil its population was uniquely immune to displacement. Of course, Thucydides did not have special access to information about Greece's remote past unavailable to the poets and prose writers who preceded him. He was instead applying his severe brand of rationalism to the large body of legends of early heroes and peoples wandering from city to city and resettling in new lands, intermingling with or driving out previous inhabitants, to create a schematic, and to our ears anthropologically plausible, portrait of early nomadic Greeks. While this portrait does not add up to reliable history, it represents a good starting place to consider why such stories of movement and displacement are so common in Greek thought about the remote past. The frequency with which Greeks resorted to the discourse of displacement is particularly striking when compared with the discourse of autochthony, which has received a great deal of scholarly attention but is in fact important in only a handful of cases of Greek self-definition.[2] The primacy of narratives concerning migration and the displacement of peoples suggests that the Greeks had a complex understanding of the relationship between themselves and the lands they inhabited, which put more emphasis on their interrelations and the process of becoming, rather than on a primordial connection with the lands they inhabited. In both their self-conceptions and in their understanding of other peoples, Greeks framed the relationship of peoples to land and environment in terms of complex diachronic evolution and adaptation.

Dislocation in early epic

The *topos* of displacement is not a major theme in the surviving early epic poems. Dislocation is barely present in the *Iliad*. The poem is fundamentally a story of war, in which one side has come from their homes overseas to attack and destroy the city of the other side; upon accomplishing this task, they plan to return home. It is the dream and goal of every Greek to return home, just as it is the goal of the Trojans to rid their homeland of the invaders. As is frequently acknowledged (most plaintively by Achilles in reference to Patroklos, 18.326–32), the only reason a Greek would not return home is that they have met their end on the battlefield.

Nor, by and large, is the *Iliad* concerned with the origins of communities or peoples or their movements.[3] In the Catalogue of Ships, peoples are identified mainly by the land or cities that they inhabit; no indication is given of where the various peoples of the Achaian and Trojan alliances originated. Relocation is hardly ever the means of the foundation of a new community, with the exception of Tlepolemos of Rhodes, who led the settlement of Rhodes with three-fold tribes (2.653–70; cf. Pindar, *Ol.* 7.20–38).[4] Elsewhere, only once is an origin story described: that given by Aeneas to describe his and Priam's ancestry (see below). It is not a story of migration; even the later idea that Aeneas fled from Troy is ruled out by the notice that Aeneas' line would remain to continue to rule in the Troad after the fall of Troy.

Dislocation does, however, lurk in the background, in the stories of some of the heroes and their ancestors. Some interesting patterns emerge in the stories of heroes who have been displaced or relocated. For men, relocation is almost never voluntary: in almost every case, the individual is forced to flee home, usually after killing someone or getting into some conflict with a relative.[5] Women regularly relocate, either peacefully through marriage or by force as a result of their community's defeat in war; definitely in the latter case, and implicitly in the former, relocation is not a voluntary act.[6] For women, relocation involves a change in identity and status; but at least a woman who marries creates a family. For men, it is often the case that the wandering man does not found a lineage. Diomedes' father did, as did Bellerophon (although he ends his life still wandering alone in the Alean Plain); but Patroklos dies childless, as far as we know, and Phoinix was cursed with sterility by his father.[7] On the whole, there is little suggestion of the movement of individuals or peoples as a way of accounting for the origin of new communities in the *Iliad*. Dislocation is a story of personal misfortune, not of communal origins.

The situation is somewhat different in the *Odyssey*, a work generally considered later than the *Iliad*. At first glance, dislocation remains an unhappy fate. The story of Odysseus' return fits the norm of the return of the warrior of the earlier work: Odysseus, like the other heroes who survived the war, must either make his way home or perish in the attempt, as his family assumes that he has done (1.161–9 *et passim*). Dislocation exists in the background, but it is usually, as in the *Iliad*, portrayed as an evil brought on by trouble at home, as in the story of Theoklymenos the seer, who seeks Telemachus' protection after fleeing home because he killed a fellow tribesman (15.272–6).[8] Odysseus himself plays with the trope in the stories he invents about himself. In one of the variations of his lies, he claims to be a Cretan who fled after killing Orsilochus, the son of Idomeneus (13.259–66). The ways that one might be displaced broaden in the *Odyssey*, but remain negative: in addition to being taken as booty in war, one can be bought or kidnapped and enslaved, a fate that can afflict both men and women (so Eumaios as well as Eurykleia, and others). In the latter books of the poem, we are introduced to the perpetual wanderer: beggars and outcasts who have lost their home due to misfortune, but find no other permanent home, and found no lineages.

The *Odyssey*, however, introduces uncertainty into the paradigm of home as the singular goal for the hero. When the poem begins, he is neither home nor dead. He is instead caught in *stasis* on Kalypso's isle, where he might choose to stay indefinitely. Unlike later mythography, the Homeric epic does not imagine him fathering children by Kalypso, but simply living with her in eternal, if forgotten, immobility.[9] The gods cannot abide this unnatural state; Zeus and Athena's directive that he return home sets the plot in motion. But even in the course of his return, the possibility that Odysseus might find another home hovers. In his *Apologos*, he recounts several other instances when he might have "lost his homecoming" through means other than death. When his men eat the fruit of the Lotus, they are in danger of forgetting their home, and the drugs that Circe administers to Odysseus' men, before turning them into swine, have the effect of causing them to forget their homeland. Even after overcoming her power, Odysseus and his men dally with Circe for a full year, at the end of which his men ask him to remember his homeland (9.91–104, 10.233–43, 466–74). There is even the possibility of real relocation. Odysseus himself describes the Island of the Goats in terms that suggest a shrewd eye for the qualities that make a place desirable for a new settlement (9.116–41). He describes the island to the Phaeacians, whose own settlement of Scheria is the most explicit account of displacement in the whole epic tradition: the entire community was forced to leave Hyperia to get away from their neighbors the Cyclopes, who plundered them (6.4–10). The two descriptions make an interesting counterpoint: on the one hand, an island near the Cyclopes that is perfect for settlement, but one which the Cyclopes have no interest in; on the other hand, a remote island settled by people who sought to escape from harassment by the Cyclopes.[10]

Even as Odysseus stands on the threshold of his homecoming, the possibility of a diversion to a new land looms. His welcome by the Phaeacians comes with the hint of an invitation to marry Nausikaa and remain on Scheria (6.244–6, 276–9; cf. 8.461–8). And while Odysseus himself expresses his preference for his home and parents over living in a rich house far off in a foreign land, away from his parents (9.34–6), he is clearly aware of such a resettlement as a possible outcome.[11] Only when Odysseus has regained Ithaca are his choices narrowed to completing his homecoming or perishing in the attempt. But even here, as he is told by Tiresias, his journey will not be complete until he has placated Poseidon by going off in search of new lands, unknown to the sea. While he is not told to settle there, the command to plant an oar and offer sacrifices to the god carries the hint of a new settlement (11.119–34); although Tiresias immediately follows with the reassurance that he will return home and die in old age, surrounded by his people.

Hesiod's poetry contains a few hints of an understanding of the dynamics of migration. While Hesiod in the *Works and Days* never explicitly advises his brother to leave Askra, he presents them as the children of an immigrant, who came from Kyme in Aeolis to settle in Askra in Boeotia. Hesiod's father made what might be called a reverse migration, from a colony on the eastern edge of the Greek world to a town near its center (*Op.* 633–40).[12] Hesiod presents himself as averse to travel, and boasts of having not gone farther than Chalcis in Boeotia (*Op.* 649–59). In his reluctant advice to Perses about sailing, he recommends being a merchant for part of the year, while coming back home to tend the farm at the appropriate season. The *Theogony*, notably reticent on geographical matters, contains no hint of the movement of peoples as a mechanism for their dispersal.

As Greek thinking about the past developed, three discursive strategies emerged for explaining the relations of peoples to the lands they inhabit. The first is the discourse of autochthony, expressed either explicitly or implicitly. The second is the discourse of immigration from abroad, which played a limited but crucial role in a number of origin stories.

The third is the discourse of migration, that is, internal displacement from another Greek land. All three discursive strategies are used, often within the same traditions, and interact in complex ways. The latter two strategies are by far the most prominent in Greek origin stories, however, indicating that transience, rather than a primordial tie to the land, is the most fundamental dynamic in Greek self-conceptions.

Aborigines

Autochthony as a means by which certain Greek communities asserted their primacy has been studied extensively, particularly in relation to Athens. The concept of autochthony has its roots in mythical traditions that intimately bind peoples to the lands they occupy through genealogical relationships. The concept of autochthony is expressed implicitly in genealogies that contain both ethnonyms and toponyms, which Malkin has termed "land genealogies," and which suggest a total bond between people and their land.[13] This form appears first in the Dardanian genealogy in the *Iliad:* when Aeneas gives his lineage and that of Priam's family, he traces his descent from Zeus' son Dardanos, founder of Dardania, through Erichthonios (like the Athenian ancestral king, a name suggestive of autochthony) to Tros, eponym of Troy, to his sons Ilos, Assarkos and Ganymede (20.215–41).[14] The stemma of the founders of Sparta, which Pausanias reports, originates with an earth-born Lelex, king and eponym of the Leleges. His grandson was Eurotas, who created the river named for him by digging it. He passed the throne to Lakedaimon, whose mother was Taygete and who had married Eurotas' daughter Sparta. Lakedaimon passed the throne to Amyklas; eventually in this stemma the throne passed to Tyndareos and Menelaos, but after Orestes, the family is replaced by the ruling Herakleidai (Paus. 3.1.1–5).[15] Whether in this sort of stemma the figures are seen as creators of the landscape, as is explicitly the case with Eurotas, or simply as eponyms of the geographical features is not always clear. The genealogical paradigm might be thought of as part of a claim to autochthony, since it intimately binds early people with the land. It is important to note, however, that in the Spartan case, as in many others, there is a disjunction between the founders of the land and the "current" inhabitants who preserve the origin story. In this case, the genealogy of early Laconia ends with the family of the Tyndaridae, while the Spartans themselves trace their origins to the Dorian outsiders who enter the land after the Trojan War, and whose claim to the land, through the promise of sovereignty made to Herakles and his descendants, is somewhat tenuous.

The more explicit form of the autochthony myth is part of several origin traditions. Rosivach has shown that *autochthonos* meant primarily "always having inhabited the same land," rather than "born from the Earth,"[16] but the origins of autochthonous peoples was sometimes expressed in the form of a story of an ancestor who was *gēgenes,* literally born from the Earth. Usually, however, such myths do not serve to explain the presence of the Greeks who related them, with the several exceptions, that will be discussed below. In fact, autochthony is generally ascribed to the primordial pre-Greek inhabitants of the lands later inhabited by Greeks. There are a number of such peoples, including the Pelasgians, Leleges, Dryopes, and Caucones. The traditions making them predecessors or co-dwellers in lands later thought of as Greek goes back at least to Homer;[17] while Hesiod labeled the Pelasgians as *autochthon* (F 43, [Apollod.] 2.1.1.5). Hekataios, perhaps the first rationalizer of the old myths, claims that barbarians lived in the Peloponnese before the Hellenes (*BNJ* 1 F 119, Str. 7.7.1).

The Pelasgians are the most widely mentioned of these aboriginal pre-Greeks, and so most thoroughly studied.[18] But they remain stubbornly obscure, as do the others. They are impossible to identify as a historical people, or even as a people from whom historically attested peoples

claim descent. As Fowler has observed, "no one would shake your hand in agora or forum and say, 'I am a Pelasgian.'"[19] Nor is it possible to collate all of the references to Pelasgians to make a coherent picture of an early people existing in the land of Greece before the Hellenes. Sourvinou-Inwood points out that the term "Pelasgian" encompassed a set of concepts, chief of which was "a pre-Greek people who had occupied all, or parts, of Greece in the past, and then migrated elsewhere, in most versions because they were forcibly expelled by the Greeks."[20] To the extent that their origins drew any attention at all, the Pelasgians were considered by Greek mythographers as the primordial inhabitants of the land before being expelled by the Greeks and condemned to a wandering existence. That they were a wandering people has been considered by some to be their primary characteristic; but their wandering was a consequence of their displacement by immigrant Greeks. This is so even in the story of their expulsion from Attica, detailed first by Hekataios. Hekataios' account, if Herodotus is to be trusted, was that they were granted land under Mount Hymettos in payment for building the wall on the Acropolis, and then subsequently driven out, either by covetous Athenians or after harassing Athenian women, whence they relocated to Lemnos, and later Akte (*BNJ* 1 F 127, Hdt. 6.137; cf. Thuc. 4.109). The story may be taken to mean that the Pelasgians came from elsewhere (perhaps Boiotia: so Str. 9.2.3). Despite their autochthonous associations, they are often considered perpetual wanderers. But the story may also reflect an alternate tradition that the Pelasgians were the autochthonous inhabitants of Athens, confined to Mount Hymettos after being displaced from the central Attic plain before being expelled from Attica altogether.[21]

Other pre-Greek peoples appear less often in the mythography, but they generally follow the same pattern as the Pelasgians. The Leleges are associated with various places, including the Troad and Ionia; but they are also associated with Locris, and in later tradition with Boiotia, Aitolia, and the Peloponnese. Hekataios also placed them in Thessaly (*BNJ* 1 F 372, Steph. Byz. s.v. *Amuros*). As for their origins, their eponym Lelex is depicted as an *autochthon* in several contexts, indicating that they are seen as aboriginal.[22] They are also displaced by Greeks from these various locations, and subsequently wander or settle in mixed refugee communities. Herodotus, for example, asserts that the Carians were originally known as Leleges, and inhabited the islands of the Aegean, before they moved to the Anatolian mainland (1.171); although he admits that the Carians deny this, and consider themselves indigenous to Caria. Similarly, the Dryopes are a supposedly indigenous people, associated most strongly with the Argolid.[23]

Self-assertions of autochthony among Greeks, on the other hand, are surprisingly rare. According to Hellanikos, the list of autochthonous peoples in Greece was limited to the Athenians, the Arkadians, the Aeginetans, and the Thebans (*FGrH* 4 F 161, Harpocration s. *autochthones*; Jacoby thinks Hellanikos refers only to the Arkadians). The Aeginetan claim to autochthony probably is based on the tradition of the Aeginetans being created from ants by Zeus for the hero Aiakos (Hes. F 205 MW).[24] The Theban claim is likely through the Spartoi, although as we shall see, this is problematic.

The two best-attested autochthony myths are those of the Athenians and the Arkadians. The tradition of Athenian autochthony has been studied extensively; there is a strong argument that it became prominent in order to support Athenian claims to supremacy over the other cities of the Aegean in the fifth and fourth centuries.[25] The extent to which the claim had its roots in early tradition, however, is less clear. That the Athenian royal line was earth-born goes back to the *Iliad*, where the Athenians are called the people of Erechtheus, who was born of the life-giving earth (2.547–8). Similarly, Erichthonios is described in later myth, and portrayed in art, as a son of Hephaistos and the Earth. Kekrops too was considered earth-born, having the lower body of a snake.[26] On the other hand, a number of the ancestral Athenian kings

were outsiders: Kodros was a Neleid, and Theseus, although born of Aegeus, had a Troizene mother and a divine father (Poseidon). The fact that the Athenians had legends about earth-born founder-kings, and the lack of any tradition of immigration into the land, made it easy for them to develop the claim that all Athenians were descended from the aboriginal inhabitants of the land. At the same time, this claim contradicted the more widely accepted view of pre-Greek inhabitants. Herodotus tries to square the circle of these conflicting claims by stating that the Athenians were originally Pelasgians and subsequently became Greek, a notoriously confused explanation.

The Arkadians, too, were widely thought to be autochthonous. Unlike with Athens, we have no truly self-representational account, since no early Arkadian mythography has been preserved—although Xenophon has a Mantinean assert Arkadian preeminence based on their autochthony, imitating Athenian claims (*Hell.* 7.1.23). Hesiod and the sixth-century Samian genealogical poet Asios describe Pelasgos, the first king of Arkadia, as born of the earth; he gave his name to the land, calling it Pelasgia (Hesiod F 43, Apoll. 3.8.1; Paus. 8.1.4–2.1).[27] He was, according to Asios, progenitor of the race of moral men, and was also a culture hero, giving his subjects simple food, skins to wear, and huts. He was followed by his son Lykaon, also a culture hero (but a human sacrificer), who was in turn followed by Nyktimos and then Arkas, after whom the people and the land were named. Pelasgos' other sons were eponyms and founders for the various communities of Arkadia, matching the pattern of other land genealogies. Both the autochthony and the primitiveness of the Arkadians recur in later references. Herodotus says that they, along with the Kynourians, are *autochthones* who lived in the land that they always occupied and were never driven from their homes, and knows them as acorn-eating rustics (1.66, 2.171, 8.73). Hellanikos, too, labeled the Arkadians as *autochthones* (*FGrH* 4 F 167).[28]

Although there is no basis for considering the Arkadians as non-Greek, their autochthony marks them as 'Others.'[29] They are in fact often associated with the Pelasgians (so Hdt. 1.146.2; Ephorus *FGrH* 70 F 113; Strabo 8.3.17). The Arkadians were not linked with the central Hellenic family tree, of Deucalion and his offspring. As Jonathan Hall has noted, Greek traditions considered the pre-Dorian inhabitants of the Peloponnese to be either Pelasgians—aboriginal, and therefore non-Greek—or Akhaians.[30] The Arkadians fell into the former category, rather than the latter. The Akhaians are an excellent example of how even an ethnonym that is attested early on (in frequent usage in Homer) and later claimed by an existing Greek population, did not carry with it a strong sense of autochthony.[31]

This brief survey indicates that autochthony, at least until the fifth century BCE, was a characteristic associated with the pre-Greek aboriginal inhabitants of the land. By and large, at least in the earliest sources that considered the origins of the various Greek peoples, stories of movement predominated. These movements were, in some key instances, movements of foreign peoples into Greece; more broadly they were displacements from one part of Greece to another.

Immigrants

Prominent among the tales of displaced peoples are the stories of immigrants from other lands who come to settle in Greece. There are only a few of these, but they play key roles in several important origin traditions. The three most significant figures are Kadmos of Phoenicia, Danaos of Egypt, and Pelops of Phrygia. It is worth considering to what degree these figures were considered ancestral to existing populations, and also the degree to which their foreignness is a central element of their character.

The first writer, it seems, to produce an account of the foreign peoples in Greece was Hekataios of Miletus, according to Strabo (*BNJ* 1 F 119, Strabo 7.7.1).[32] Strabo gives an extended list of the various barbarians who inhabited Greece, which may all derive from Hekataios. Along with the aboriginal non-Greeks who lived in the Peloponnese, he lists barbarian peoples who immigrated into and occupied Greece. The list included the Phrygians who accompanied Pelops, the Egyptians led by Danaos, the Phoenicians who came in with Kadmos, the Thracians who came with Eumolpos and settled in Attica, as well as Tereus of Daulis, and the Aones, Temmikes and Hyantes. The evidence Strabo adduces is the foreign nature of the various founder-heroes, as well as the presence to his own day of these peoples (Illyrians, Thracians, and others) in the lands immediately around Greece; but it is not clear that this reasoning is also attributable to Hekataios. Certainly, however, the idea that the ancestors of the Peloponnesians and Thebans were foreign immigrants can be traced at least to Isocrates (10.68, 12.80) and Plato (*Menex.* 245c–d).[33]

While Boiotia developed a genealogical tradition of collective descent from an eponymous Boiotos, son of Poseidon by the later Archaic period—himself not autochthonous, but originating in Thessaly—this tradition intersected with a tradition of immigrant rulers, Kadmos the Phoenician and his followers and descendants.[34] The story of Kadmos in its many variations was clearly early. Kadmos himself is mentioned in the *Odyssey* as the father of Ino (5.333–5), while the Kadmeians of Boeotia—presumably his descendants—are mentioned in the context of tales of Diomedes' father Tydeus (*Il.* 4.385–400, 5.801–8; *Od*. 11.275–7). The Kadmeians are curiously not mentioned in the Catalogue of Ships, in which the substantial Boeotian contingent is led by relatively minor figures who are linked in later tradition to Boiotos.[35] Kadmos is also named by Hesiod as the spouse of Harmonia and father of five children in Thebes (*Theog.* 937, 975–9).

None of these early references explicitly mentions his foreign origin; but the tradition of the eastern origins of Kadmos and Harmonia may nonetheless be early. Homer calls Harmonia the daughter of Phoinix, a name that may or may not be affiliated with the Phoenicians at this early date (*Il.* 14.421–2).[36] There is a view based on one tradition that Agenor was descended from Io and that Kadmos was originally an Argive hero; but this is no more primordial than the tradition that Kadmos was a foreigner. The earliest clear indications of Kadmos' foreign origin come from late sixth- and early fifth-century sources: it is suggested in Hekataios (F119, possibly; cf. also F 20), Pherekydes of Athens (Pher.: Ff 21, 86–7, 89 Fowler), Hellanikos (Hell.: *FGrH* 4 F 51 Schol. Ad Homer *Iliad* B 494, cf. Apoll. *Bib*. 3.4.1), Herodotus (2.44, 49, 4.45, 147, 5.57–9 cf. 1.2, 2.145), Euripides (*Ph*. 5f., 638 ff.; *Ba.* 170–72, 1025; *Phrixos* F 819, 820 Nauck; *Cret*. F 472 Nauck; *Hyps*. F 1 iii 20f.), and later sources; he is generally considered a Phoenician, although he has connections to Egypt as well.[37]

Was Kadmos an ancestral figure? He was the founder of Thebes, although there was an alternate tradition, going back to Homer, naming Amphion and Zethos as founders (*Od*. 11.262–5). The two traditions were only uneasily reconciled.[38] The story of Kadmos' search for his sister Europa, his consultation of the oracle, his following the cow, slaying the dragon, and planting the dragon's teeth, are preserved in Hellanikos (*FGrH* 4 F 1a,b, 51) and later sources.[39] Kadmos' story certainly fits into the pattern of the ancestral "culture hero": arriving from outside, with the support of the gods he slays monsters and establishes the polis-community that to the Greeks represented civilized living.[40] But whether he literally was an ancestor of people is harder to establish. His family history is rich, but his descendants tended to come to bad ends. Of his five children by Harmonia, Ino, Semele, Agave, Autonoe, and a son, Polydoros, the traditions report that Ino became divine, and Semele gave birth to a divine child, while Agave's child Pentheus met an unpleasant end at the hands of that god. Polydoros

is a minor figure, who served only to tie the family of Kadmos to the Labdakids, who also met unhappy ends.[41] According to Herodotus, the Kadmeians—which may include what was left of his family as well as his traveling companions—were eventually driven out of Boiotia by the Argives (the Epigonoi), to be replaced by Boiotians, who drove out the Gephyraei, who somehow escaped the previous purge. Thucydides follows a similar narrative, in more allusive terms (1.12.3).

In addition to biological offspring, Kadmos also had symbolic children in the form of the Spartoi, the sown men produced from the dragon's teeth. This is as clearly an autochthonous myth as one could hope for, and yet it does not serve to fulfill the function one expects of an autochthony myth. The Spartoi fight each other until only five are left: Echion, Oudaios, Chthonios, Hyperenor, and Pelor, named by Pherekydes (F 22a Fowler) and Hellanikos (*FGrH* 4 F 1, who says there are only five Spartoi to begin with).[42] Of these, several intermarry with the Kadmeians, so their line ends with Pentheus and with the death of Kreon and his sons (Eur. *Phoen*. 931–44). As Fowler has noted, there is no evidence that the leading clans of Thebes in historical times claimed descent from the Spartoi, or even from Kadmos.[43]

Beyond Boiotia, however, Kadmos' companions are credited with settling in a number of areas. The earliest source for these settlements is Herodotus, who promulgates a veritable Kadmeian diaspora, to which later authors added some places. Herodotus tells at some length of the occupation of Thera by Phoenicians led by Membliaros, one of Kadmos' companions (4.147–8).[44] He also discusses the Gephyraei, who were Phoenicians who had come to Boiotia with Kadmos but were later expelled by the Boiotians and found refuge among the Athenians (5.57). He mentions in passing the Kadmeians evicting the Dorians from Histaeotis (1.56), as well as Kadmeians among the Ionians (1.46). A later tradition, perhaps based on Hellanikos' account in which Harmonia was the daughter of Elektryone, who was from Samothrace (*FGrH* 4 F23 Schol. App Rhod. 1), had the Kadmeians visiting the island, although perhaps not as settlers. Later stories also circulated concerning the visits of Kadmos to Thrace, Rhodes and other places in the Aegean and Eastern Mediterranean. Yet whether these claims represent authentic local traditions of a Phoenician origin (much less an actual historical memory of a Phoenician presence) is not clear. Herodotus himself admits that the Gephyraean clan claims to come from Eretria. As for Thera, although he seems to be reporting a Theran tradition by which the island was originally settled by Kadmeians, and then refounded by Theras the Kadmeian (descended from Poyneices), Theras leads a party of Minyans, who settle and intermix with the previous inhabitants of the island. What is missing from these stories is a "pure" origin narrative in which any people can trace their beginnings to a single founder, family, or people.

The myth of Danaos the Egyptian is similarly early; references to it appear in the Hesiodic *Ehoiai* (FF 127–9 MW).[45] The version known from Aeschylus, in which Danaos, an Egyptian descended from the Argive Io, came to Argos with his daughters and is followed by his brother Aigyptos and his sons, must be largely traditional. Hekataios was already reacting against it when he claimed that Aigyptos did not come himself to Greece, but only his sons, and of these fewer than twenty, not fifty. He also asserted that Danaos brought the alphabet with him from Egypt, a view that Herodotus contradicted (*BNJ* 1 F 19, 20; Hdt. 5.58). Aeschylus' *Suppliants* preserves the best-known version of the story, in which the Danaides and their father seek asylum in Argos from their suitors, the Aigyptoi. The story was continued in the latter two plays of the trilogy, in which the Danaides slay their husbands, and Danaos himself becomes king of Argos, after the previous ruler Pelasgos son of Palaichthon was killed fighting the Aigyptoi. Meanwhile the one daughter not to kill her intended spouse gives rise to the royal family of Argos, and Danaos marries the other daughters off to Argive

men.[46] Of course, in variant versions, the daughters of Danaos aside from Hypermestra are killed. As with the tradition of the Kadmeians, this suggests some conflict among the Greeks about the value of claiming barbarians as ancestors. But the origins of the Danaid line with an Argive, and the intermarriage of one or more of the Danaids with Argives, follows the pattern of combining assertions of autochthony with those of immigrant origins. As Fowler has said, "the story that Io descended from the river Inachos, went to Egypt, whence her descendant Danaos returned, allowed the inhabitants of the Argolid to remain autochthonous, but also to assert their ethnicity through the common device of arrival of the founder from abroad."[47] Like the Kadmeians, the Danaoi were associated with other places besides their primary destination. A tradition records that they founded the temple of Athena on Lindos, Rhodes, and were progenitors of the priests of Poseidon at Ialysos.[48] Nowhere outside of Argos, however, are they credited with being ancestral to local populations.

Another well-known immigrant ancestral figure is Pelops.[49] He is named in the *Iliad,* with the epithet *plēxippos*, "lasher of horses," as the ruler to whom Hermes gave the scepter that was passed to Atreus and ultimately to Agamemnon (2.98–108), suggesting that the earliest traditions knew him as the winner of the chariot-race against Oinomaus and the ruler and namesake of the Peloponnese. But was Pelops a foreigner in the earliest tradition? Tantalos and his son Pelops were associated with Anatolia by the sixth century, although the actual region of origin was disputed. Hekataios (*FGrH* 1 F 199), Herodotus (7.8, 11) and Sophokles (*Ant.* 824 [Pelops' sister Niobe], *Aj.* 1292) derive him from Phrygia. Pindar says that Pelops was from Lydia (*Ol.* 1.24). Later sources put Tantalos in Paphlagonia.[50]

The race for the hand of Hippodameia is well established in early tradition, while the descent of the Atreidai and Thyestes is established somewhat later. One aspect of the Pelops story that distinguishes it from that of both Kadmos and Danaos is that Pelops comes alone to the Peloponnese: therefore, he represents not an immigration of a people, but an ancestor of a royal line of descent. Aside from the famous stories associated with the house of Atreus, Pelops was claimed as ancestor in other cities of the Peloponnese.[51] But his descendants are not seen as displacing the previous inhabitants of the Peloponnese. Indeed, the Atreidai are eventually displaced by the Dorians, while Niobe's children do not come to a good end either. In the long run, Pelops bequeaths little more than his name to his adopted land.

Migrants

Far more common than stories of autochthony or foreign immigrants are the stories of the migrations of Greek tribes, an explanation that may have grown in popularity as the Greeks took to establishing colonies abroad.[52] The pattern of such stories usually consisted of a tribe or people leaving or being expelled from a prior or ancestral land (often without specifying their ultimate origin), and moving into a new land. Often the incursion results in the expulsion of aborigines to make way for the newcomers; but the wandering peoples may also settle in previously uninhabited lands, or intermingle with the aborigines. The expelled aborigines often subsequently disappear from the map, or they are linked to distant peoples to explain their absence from Greece proper, as we have seen in the case of the Pelasgians, Leleges and others.

Herodotus deploys the discourse of migrations extensively, most notoriously in his discussion of the origins of the Ionians and the Dorians (1.56). The former, he says, are Pelasgians who never migrated anywhere (*kai to men oudamēi kō exechōrēse*); while the latter are Hellenes, and were constantly on the move (*to de poluplanēton karta*). Herodotus then goes on to give an account of the migration of the Dorians from Phthia to Histaeotis, then to Mount

Pindus, then to Dryopis, and finally to the Peloponnese. Unlike the heroic wanderings of figures such as Kadmos, these are presented explicitly as mass movements. He mentions two legendary kings—Deucalion and Doros—but as chronological markers rather than as leaders of these movements; he even downplays the obvious connection between Doros and the new name of the people. Further, he largely strips away the mythological apparatus for explaining these movements, referring only once to the Kadmeans as a cause for the expulsion of the Hellenes from Histaeotis. Later, in his discussion of the Ionians, he abandons his earlier position that they (as Pelasgians) never moved; he notes that they were driven out of the Peloponnese by the Akhaians (1.145). He goes on to describe them as a hodgepodge of peoples from different parts of Greece: Abantes from Euboea, Minyans from Orchomenos, Phocians, Molossians, Pelasgian Arkadians, Epidaurian Dorians, and Athenians who intermarried with Carian women (146). Here he may be expressing anti-Ionian prejudice, by indulging in contempt for peoples of mixed ancestry; he is also evidently reconciling multiple traditions about the origins of the Ionians of Anatolia.

Herodotus did not invent these tales, but adapted them from existing traditions. The myth complex of the "Dorian Migration" and the contingent "Return of the Herakleidai" were already well established. Many of the communities of the Peloponnese, as well as islands in the Aegean including Aegina, Crete, Thera, Rhodes, Kos, and others, traced their origins directly (or indirectly via Sparta) back to a movement of Dorians from somewhere in northern Greece in the period after the Trojan war—sixty years after, according to Thucydides' dating. While some scholars still defend the historicity of a "Dorian Invasion/Migration" on primarily linguistic grounds, growing skepticism about the historical reality of the movement of the Dorians has led some to pursue a more productive approach of treating the complex as a means of building solidarity around a sub-Hellenic ethnic identity.[53]

The Dorians appear first in Homer, when Odysseus describes Crete as an island populated by various groups, including "three-part Dorians" (*Dōriees te trikhaikes*, *Od.* 19.177). The poems do not refer to Dorians in the Peloponnese, but this passage is often associated with the entry for Rhodes in the Catalogue, in which the Heraklid Tlepomenos is said to rule the Rhodians "arranged in three parts" (*hoi Rhodon amfenemonto dia trikha kosmēthentes*), having come as a refugee from somewhere else (the Peloponnese?) and having settled his followers in a threefold division of tribes (*trikhtha de ōikēthen katafuladon*; *Il.* 2.653–70). The earliest reference to a movement of Dorians into the Peloponnese comes from Tyrtaios, who sings of Zeus having given this town (Sparta) to the Heraklids, with whom we (the Dorians) came, leaving windy Erineos to arrive in the island of Pelops (fr. 2 West). Apart from the unresolved question of where Erineos might be, the verses make clear that notion of the Dorians as immigrants was already entrenched in Spartan thought in the sixth century.

What is striking about the Dorian migration complex is that the "homeland" is not central to the Dorian ethnic identity: Tyrtaios has them come from Erineos, while Herodotus has them first living in Phthia, and Thucydides claims that Doris was the metropolis of the Lakedaimonians (1.107). As Herodotus suggests, the most salient characteristic of the Dorians is their mobility. Furthermore, as Malkin and Hall have pointed out, the story of the "Dorian invasion," flexible in itself, does not map totally onto the story of the "Return of the Herakleidai." The latter emphasizes the origin of the sons of Herakles in the Peloponnese, and their return to reclaim their birthright. The Dorians, on the other hand, are always considered newcomers. Thus, what is important about the Dorians is not their place of origin, or their claims to the lands they occupy later, but their status as wanderers who claim new territory throughout southern Greece, driving out or subsuming the previous inhabitants.

The other major Greek people who were widely seen as immigrants were the Ionians, whose movement was also seen as occurring after the Trojan War.[54] By the fifth century, the ethnic origins of the Ionians as colonists from Athens was promoted by the Athenians as a means of bolstering their claims of supremacy over the islands and states in the Eastern Aegean that were part of their empire. The Athenian connection to the Ionians was established in the previous century: Solon describes Athens as the "oldest land of Ionia" (F 4a West, Arist. *Ath. Pol.* 5.2). Herodotus, too, is familiar with the claims of the Athenians to the ancestry of the Ionians, although he names them as one of an assortment of peoples who populated Ionia (1.143.2; 146.2–3).[55] The account of the Ionian migration in Hellanikos traces them originally to Messene, from which Melanthos is driven by the Heraklids to settle and become king in Athens. His grandson Neleos leads an expedition to found the twelve cities of Ionia (*FGrH* 4 F 125; cf. 48).[56] Mimnermos, on the other hand, indicates that Kolophon was founded directly from "Nelean" Pylos (F 9 West). Herodotus himself suggests that the Ionians were located at some stage in Akhaia before being driven out by the Akhaians; he might also be taken to suggest that the people of Boeotia at the time of the founding of Thebes by Kadmos were Ionians (1.145; 5.58).[57] What this suggests is that there was no strong unitary tradition for the origin of the Ionians. Nor is there a clear "Promised Land" element in the narratives of the settlement of Ionia, as might be argued in the case of the Dorians.[58] While the attachment to the land of Ionia is expressed in the devotion to the Panionion, the self-conception of the Ionians as immigrants with a tenuous claim to the land is reflected in the earnest discussions and attempts to flee Ionia in the face of the Persian invasion, on the part of the Phokaians, and then collectively of all of the Ionians. It is fair enough to note that this view of the Ionians as transient inhabitants of their land might be imposed by Herodotus himself, although he makes no stronger claim for the attachment to the land of the Dorians of the Dodecannese and adjacent lands.

Conclusion

The foregoing analysis establishes a number of key points which must guide future discussion of migration in Greece, considered either as a historical phenomenon or as a strategy deployed by Greeks in order to account for their presence in their various lands. The first point is that the earliest Greek literature—Homeric and Hesiodic epic—contains very little expression of the notion that migration may account for the origins or current locations of peoples, although there is some indication of an awareness of the possibility of relocation. Instead, peoples are generally recognized as coexistent with their lands; to the extent that the relationship between the two is articulated, it is expressed through genealogical linkages, in which the land is created (or named) as part of a family relation with the ancestors of the peoples who inhabit it. Fully articulated notions of the migrations of peoples to account for the dispersion of the Greek and non-Greek *ethnē* appear in the fifth century in the works of Herodotus and Thucydides. The progenitors of these ideas can in some cases be traced into the sixth century, so it is reasonable to suppose that the ideas about large-scale movements of peoples accounting for the current dispositions of peoples most likely emerged in the period from the eight to the sixth centuries BCE.

The second point that I have established is that, as a general rule, autochthony was not used to account for the location of Greeks in their homelands. By and large, autochthony was ascribed to ancestral figures who were associated with the creation or naming of the land and its features, and to non-Greek peoples who subsequently were displaced from their homeland, and either vanished or relocated to distant lands. While it is true that autochthony plays a prominent role in Athenian self-representation in the fifth and fourth centuries, it should be acknowledged

that this is an exceptional instance. The Arkadians were another exceptional case, being somewhat outside the Hellenic genealogical scheme, and even in historical times seen as primitive.

The third, and most significant, point is complementary to the second: that most origin stories told by the Greeks about themselves involved displacement of some sort. This displacement might, in some cases, originate outside of the Greek world; or it may originate in a different Greek land. It is not the case in most of these stories that the "ancestral homeland" plays an essential role in building a sense of self-identity for the community: the Boeotians did not consider themselves Phoenicians, and the Argives did not see themselves as Egyptians. Indeed, many well-documented cases of such migratory origin stories involve multiple traditions of different homelands, which are often synthesized semi-coherently in our later sources. Nor can a myth of the "Promised Land" variety be identified in most cases as a way of accounting for the location of a people—although hints of such an explanatory mechanism might be seen in a few cases, such as the story of the Return of the Herakleidai. Some origin traditions locate the place of origin of the ancestral founder outside of Greece, but in these cases, as in the cases of displacement within Greek lands, the place of origin is often disputed. Instead of emphasizing a connection with an ancestral people or land, these origin narratives by and large emphasize horizontal connections between peoples who share common ancestors. In most Greek traditions, genealogical bonds, as well as stories of migration, serve to explain and emphasize connections between the various Greek communities, at the expense of de-emphasizing the ties between the communities and their lands.

Notes

1 "We are all immigrants": this anarchist graffito, which I spotted in Ayia Paraskevi, Athens, reminded me of the current relevance of issues of migration and identity in Greece. On one level, the message expresses solidarity with immigrants in Greece, who have been singled out for abuse and vilification by the crypto-Fascist "Golden Dawn" party that has gained popularity in the last few years. On a deeper level, it challenges the opposition of "pure" Greeks to "foreign" influences, which has been a longstanding trope of modern Greek national identity.

2 See Kennedy, this volume.

3 This point has already been noted by Robertson, who says that "the notion of a whole people migrating from one land to another is quite foreign to early epic poetry, which speaks rather of errant scions ousted by blood feuds or by other personal imbroglios" (1980, 3).

4 For later references, see Gantz 1993, 466.

5 Meges, leader of the Doulichians, was the son of Phyleus, had fled Elis because of a conflict with his father (2.628–9). Tlepolemos, having killed his uncle Likymnios, fled to Rhodes (2.661–9). Proitos drove out Bellerophon after his wife falsely accused the hero (6.157–62). Phoinix fled after sleeping with his father's mistress, and threatening to kill him (9.444–71). Medon had fled from Phylake after killing a kinsman of his stepmother (13.694–7, 15.333–7). Patroklos had come to Peleus' home as a boy after unintentionally killing a playmate (23.85–8). Diomedes says that his father left his family home in Pleuron and settled in Argos, but he does not say why his father left (14.115–20). On the pattern of exile caused by violence in Homer, see Roisman 1981, 8–17.

6 Helen complains to Aphrodite that the goddess will move her to another land to wed her to another man (3.398–402); Hektor worries that Andromache will be taken off to serve a Greek if he is killed (6.450–58). Marriage in the world of Homer is exogamous and patrilocal, so is the common means by which women relocate. The choice of whom to marry is made by the woman's father; for the woman, marriage is a form of exile.

7 Roisman 1981, 29 considers a successful settlement of exiles in Homer as the norm, although several of the instances he lists involve individuals living as dependents of others, such as Phoinix and Patroclus.

8 The trope is reinforced in a digression concerning Theoklymenous' ancestor Melampous, who left Pylos and settled in Argos because of conflicts with Neleus (15.222–58).

9 Hesiod has Kalypso bearing two sons to Odysseus, Nausithoös and Nausinoös (*Theog.* 1017–18); and Circe bears him two as well (1011–13). With the rise of genealogical thinking, it became unimaginable that a hero would not father children on the women he slept with.
10 Clay 1980 suggests that 'Goat Island' was the land of Hyperia which the Phaiakians had abandoned; but Bremmer 1986 argues against this view.
11 Back in Greece, Menelaos suggests to Telemachus that he would welcome Odysseus with all his people to settle in a city in his own kingdom (4.174–80); whether the offer is real or a piece of *politesse* is never resolved.
12 Kyme is described by Strabo as a colonial foundation of the people of Phrikion in the Locrian mountains above Thermopylae, settled in the aftermath of the Trojan war (13.3.3 C 621).
13 Malkin 1994, 19; also J. Hall 1997, 53: "the primeval figures which typically occupy the upper, cosmogonic reaches of a genealogy normally serve to explain the toponyms in any given landscape." Hall refers to these figures as "toponymic heroes" (88).
14 The later names in the genealogy down to Aeneas do not seem to have specific toponymic associations. Later, Hellanikos has Dardanos as one of the sons of Elektra, daughter of Atlas; he comes from Samothrace to found Troy (*FGrH* 4 F 23).
15 See Calame 1986; Malkin 1994, 19–22.
16 Rosivach 1987.
17 Homer lists, as Trojan allies, Karians, Paionians, Leleges, Kaukonians and Pelasgians (*Il.* 10.427–9), along with Lykians, Mysians and Phrygians, inhabitants of Asia Minor, and Thracians. In the Catalogue, the Pelasgians are listed as dwelling in Larisa—either in Thessaly or, more likely, Asia Minor: 2.840–43; Argos and Zeus of Dodona are called "Pelasgian": 2.681, 16.233. Odysseus lists Pelasgians along with Achaians, Kydonians, Eteocretans, and Dorians, as the inhabitants of Crete: *Od.* 19.175–7. See Schachermeyr 1937, 252–3; Fowler 2013, 87–9.
18 For example, Fowler 2003; 2013, 84–112; Sourvinou-Inwood 2003.
19 Fowler 2013, 84. Fowler only briefly considers (86 and n. 7) the possible self-identification as Pelasgians by the inhabitants of Lemnos who spoke a non-Greek language possibly related to Etruscan (attested by the inscribed stele NAM 13644, as well as several inscribed Lemnian pots: Van der Meer 1992, Hemmerdinger 1995).
20 Sourvinou-Inwood 2003, 107.
21 Laird (1933) argued at length that Herodotus understood that the Pelasgians were the primordial inhabitants of Athens; he affirms that Herodotus did not know of the tradition of Boiotian origins (100). The version in which the Pelasgians are aboriginals who are subsequently displaced, of course, undermines the Athenian claim of autochthony, which is why Isocrates, in advancing that claim, insists that the Athenians did not drive anyone from the land (*Panegyrikos* 24).
22 Geyer 1925; Fowler 2013, 96–100.
23 J. Hall 1997, 74–7; Fowler 2013, 100–103.
24 Gantz 1993, 220.
25 So R. Parker 1986, 193–6; Rosivach 1987; Loraux 2000; J. Hall 1997, 51–6; Roy 2014. Kolendo (2005, 39) notes that autochthony is used rarely as an explanatory mechanism outside of Athens, compared with migration.
26 Gantz 1993, 233; Shapiro 1998, 131–51. Parker (1986, 194–5) sees the myths as expressions of collective autochthony.
27 Nielsen 2002, 32–3; Roy 2014, 243. Nielsen (33–4) suggests that Pelasgos may be a literary character, and that the Arkadians' own traditions started with Nyktimos and Arkas. But this is unlikely, if the Pelasgos tradition goes back to Hesiod. Scheer (2011, 11) also sees Arkas as the primordial Arkadian ancestor.
28 For later references to Arkadian autochthony, see Nielsen 2000, 72 n. 129.
29 On the Arkadian lack of connection with the other Greek peoples, see Nielsen 2000, 32; J. Hall 1997, 47.
30 J. Hall 1997, 72; 2002, 33–5, 171.
31 The Argives and Lakedaimonians took the name 'Akhaians' after the sons of Akhaios arrived in their areas (Paus. 7.1.7). The Akhaians were subsequently expelled and eventually settled in the region known later as Akhaia, displacing the Ionians (Hdt. 7.94; 8.73). The kings of Sparta, however, claimed to be Akhaians (Hdt. 5.72), perhaps as a way of emphasizing their primordial connections with the land they ruled. Cf. J. Hall 1997, 72–3.
32 Jacoby accepted the entire passage as deriving from Hekataios; see Pownall's commentary in BNJ. But at least some of the observations, such as the comment about lands that were once Greek that are now controlled by barbarians, must refer to Strabo's own day.

33 E. Hall 1989, 168.
34 On traditions concerning Boiotos, see Larsen 2007, 17–30. On Kadmos, see Edwards 1979, 17–64; Gantz 1993, 208–10, 467–73; Kühr 2006; Fowler 2013, 347–61. According to Thucydides, the Boiotians were not indigenous, but were from Arne in Thessaly (1.12.3); although Larsen 2007, 58 notes that Thucydides hedges, by claiming that part of the population had already inhabited Boeotia, and took part in the Trojan War—an attempt to explain the Boiotian contingent in the Catalogue.
35 The entry on Boeotia (2.494–510) focuses largely on the geography of the land. On the heroes who led the Boeotians see Larsen 2007, 35–8; she notes that these figures appear later as grandsons of Boiotos (Diod. 4.67.7).
36 Some have denied that Phoinix is an eponym of the Phoenicians at this date, but have suggested that Harmonia's patronym may have inspired the association with the Phoenicians in later writers: Speiser 1936; Muhly 1970, 33; Edwards 1979, 52–5.
37 Fowler 2013, 347–50. Confusion between a Phoenician and Egyptian origin for the Kadmeians is evident in Pherekydes' genealogy, and in Herodotus as well. Kadmos is an Egyptian or a Phoenician living in Egypt in some later versions: Hek. Abd. (*FGrH* III A, 264 F 6); Diod. Sic. I. 23; Konon (*FGrH* I A, 26 F 1), and others; see Edwards 1979, 45–8.
38 Fowler 2013, 351–2; Gantz 1993, 215–16, 483–7. Kühr 2006, 118–32 suggests that Amphion and Zethos represent a Boiotian tradition, while Kadmos is a Theban tradition.
39 Edwards 1979, 31–2; Fowler (2013, 351–60, esp. 357–8) is doubtful that F 51 is all from Hellanikos.
40 J. Hall notes that dynastic culture heroes often arrive from outside the locality to which they are associated: J. Hall 1997, 87.
41 On Kadmos' children, see Edwards 1979, 21; Gantz 1993, 483–4 on references to Polydoros; Fowler 2013, 353–4.
42 Fowler observes that the names connote "chthonic, gigantic qualities," more suitable for protecting spirits than for ancestors (2013, 355).
43 Maion son of Haimon, a Kadmeian, is mentioned by Homer as having survived an encounter with Tydeus (*Il.* 4.391–8). There are other variants of the tradition in which Antigone and Haimon survive to have offspring: Gantz 1993, 468–71, 521; Fowler 2013, 355.
44 The Theran descent from Phoenicians is "doubly determined," as Theras, the Spartan colonist of the island, is himself a Kadmeian, descended from Polyneices. For later references, see Edwards 1979, 29–30.
45 There was also an early epic *Danais*, and two plays by Phrynichos, *Aigyptoi* and *Danaides*: Gantz 1993, 203.
46 See Gantz 1993, 203–8; Fowler 2013, 245–8. On the implications of this play regarding fifth-century immigration to Athens and Athenian reactions to it, see Kennedy 2014, 26–38.
47 Fowler 2013, 245.
48 Craik 1980, 159.
49 Gantz 1993, 532–3, 540–45.
50 Paphlagonia: Istros *FGrH* 334 F74, Diod. Sic. 4.74. Tantalos as the son of Tmolos: Schol. Euripides, *Or.* 5. Other references: Fowler 2013, 426–7 and nn. 4, 5.
51 Pelops is named as the father of Sikyon, Kleonymos, and Argeios, and Alkathoos, founder of Megara, in Archaic sources: Gantz 1993, 544; Fowler 2013, 428: "The Pelopidai did not survive even in their homeland, because they never were an ethnos; their function was to be displaced by true ethne like the Dorians, or survived by the Achaioi and the Arkades."
52 Kolendo 2005, 31.
53 The older credulity about the reality of the "Dorian Invasion" found in such authors as Cook 1962, Nixon 1968 is continued, in more circumspect form, in Cartledge 2002, 65–87; in V. Parker 1995, and most recently in V. Parker 2013, 52–4. Skepticism about the reality of an invasion is expressed by Hooker (1979), who argued that the Dorians were a substrate of the population of Peloponnesians who overthrew their Akhaian overlords at the end of the Bronze Age. Malkin (1994, 15–45) explores the complex as an expression of identity formation in later eras, but nonetheless concedes the possibility of a historical reality behind the complex; whereas J. Hall (1997, 56–65; 2002, 73–82) takes a harder line: "To sum up, the tradition concerning the arrival of the Dorians and the return of the Herakleidai is best regarded as a composite and aggregative system of beliefs which had evolved from disparate origins and for the purposes of defining discrete ethnic groups" (1997, 64).
54 On the Ionian Migration, and arguments concerning its historicity, see Sakellariou 1958; 2009, 481–593; Lemos 2007.

55 J. Hall 1997, 51–6; J. Hall 2002, 67–73.
56 Frame 2009, 515–22.
57 Sakellariou 2009, 562.
58 On the "Promised Land" trope, see Smith 2003, 131–65; Kaplan 2014.

Bibliography

Bremmer, Jan N. 1986. "A Homeric Goat Island (*Od*. 9.116–141)." *Classical Quarterly* 36: 256–7.

Calame, Claude. 1986. "Spartan Genealogies. The Mythological Representation of a Spatial Organisation." In *Interpretations of Greek Mythology*, edited by Jan Bremmer, 153–86. Totowa, NJ: Barnes & Noble Books.

Cartledge, Paul. 2002. *Sparta and Lakonia: A Regional History, 1300–362 BC*. 2nd edn. NewYork: Routledge.

Clay, Jenny S. 1980. "Goat island. *Od*. 9.116–141." *Classical Quarterly* 30: 261–4.

Cook, R.M. 1962. "The Dorian Invasion." *Proceedings of the Cambridge Philological Society* 8: 16–22.

Craik, E. M. 1980. *The Dorian Aegean.* London: Routledge & Kegan Paul.

Edwards, Ruth B. 1979. *Kadmos the Phoenician. A Study in Greek Legends and the Mycenaean Age.* Amsterdam: Adolf M. Hakkert.

Fowler, Robert L. 2000. *Early Greek Mythography. I. Text*. Oxford: Oxford University Press.

———. 2003. "Pelasgians." In *Poetry, Theory, Praxis. The Social Life of Myth, Word and Image in Ancient Greece*, edited by Eric Csapo and Margaret C. Miller, 2–18.Oxford: Oxbow Books.

———. 2013. *Early Greek Mythography. II. Commentary.* Oxford: Oxford University Press.

Frame, Douglas. 2009. *Hippota Nestor*. Cambridge, MA: Harvard University Press.

Gantz, Timothy. 1993. *Early Greek Myth: A Guide to Literary and Artistic Sources*. Baltimore, MD: Johns Hopkins University Press.

Geyer, F. 1925. "Leleger." In *Paulys Realencyclopädie der classischen Altertumswissenschaft*, edited by Georg Wissowa, 1890–93. Stuttgart: A. Druckenmüller.

Hall, Edith. 1989. *Inventing the Barbarian: Greek Self-Definition through Tragedy.* New York: Oxford University Press.

Hall, Jonathan. 1997. *Ethnic Identity in Greek Antiquity.* Cambridge: Cambridge UniversityPress.

———. 2002. *Hellenicity. Between Ethnicity and Culture.* Chicago, IL: University of Chicago Press.

Hemmerdinger, Bertrand. 1995. "Thucydide, IV, 109, 4 et les inscriptions étrusques de Lemnos." *Bolletino dei Classici* 16: 13–14.

Hooker, J.T. 1979. "New Reflexions on the Dorian Invasion." *Klio* 61: 353–60.

Kaplan, Philip. 2014. "Ethnicity and Geography." In *A Companion to Ethnicity in the Ancient Mediterranean*, edited by Jeremy McInerney, 298–311. Hoboken, NJ: Wiley-Blackwell Press.

Kennedy, Rebecca Futo. 2014. *Immigrant Women in Athens: Gender, Ethnicity, and Citizenship in the Classical City*. London and New York: Routledge.

Kolendo, Jerzy. 2005. "Origines antiques des débats modernes sur l'autochthonie." In *Histoire, Espaces et Marges de l'Antiquité. Hommages à Monique Clavel Lévêque*, 4. Besançon: Presses universitaires franc-comtoises.

Kühr, Angela. 2006. *Als Kadmos nach Boiotien kam. Polis und Ethnos im Spiegel thebanischer Gründungsmythen.* Stuttgart: Franz Steiner Verlag.

Laird, A.G. 1933. "Herodotus on the Pelasgians in Attica." *American Journal of Philology* 54: 97–119.

Larsen, Stephanie L. 2007. *Tales of Epic Ancestry. Boiotian Collective Identity in the Late Archaic and Early Classical Periods.* Historia Einzelschrift, Heft 197. Stuttgart: Franz Steiner Verlag.

Lemos, Irene S. 2007. "The Migrations to the West Coast of Asia Minor: Traditions and Archaeology." In *Frühes Ionien: eine Bestandsaufnahme. Panionion-Symposion Güzelçamlı, 26 September–1 Oktober 1999*, edited by Justus Cobet, Volkmar von Graeve, Wolf-Dietrich Niemeier and Konrad Zimmermann, 713–27. Mainz am Rhein: Philipp von Zabern.

Loraux, Nicole. 2000. *Born of the Earth: Myth and Politics in Athens.* Translated by Selina Noel McLeod Stewart. Ithaca, NY: Cornell University Press.

Malkin, Irad. 1994. *Myth and Territory in the Spartan Mediterranean.* Cambridge: Cambridge University Press.

Muhly, J.D. 1970. "Homer and the Phoenicians." *Berytus* 19: 19–64.

Nielsen, Thomas H. 2002. "The Concept of Arkadia—The People, Their Land, and Their Organisation." In *Defining Ancient Arkadia. Symposium, April 1–4, 1998,* edited by T.H. Nielsen and J. Roy, 16–79. Copenhagen: Det Kongelige Danske Videnskabernes Selskabe.

Nixon, Ivor G. 1968. *The Rise of the Dorians.* New York: Frederick A. Praeger.
Parker, Robert. 1986. "Myths of Early Athens." In *Interpretations of Greek Mythology*, edited by Jan Bremmer, 187–214. Totowa, NJ: Barnes & Noble Books.
Parker, Victor. 1995. "Zur Datierung der Dorischen Wanderung." *Museum Helveticum* 52: 130–54.
———. 2013. *A History of Greece. 1300 to 300 BC.* Hoboken, NJ: Wiley-Blackwell Press.
Robertson, Noel. 1980. "The Dorian Migration and Corinthian Ritual." *Classical Philology* 75: 1–22.
Roisman, Joseph. 1981. *Exile and Politics in Early Greece: From the Time of Homer to the End of the Archaic Period.* PhD, U. of Washington. Ann Arbor: University Microfilms International.
Rosivach, Vincent J. 1987. "Autochthony and the Athenians." *Classical Quarterly* 37: 294–306.
Roy, James. 2014. "Autochthony in Ancient Greece." In *A Companion to Ethnicity in the Ancient Mediterranean*, edited by Jeremy McInerney, 241–55. Hoboken, NJ: Wiley-Blackwell Press.
Sakellariou, Michel B. 1958. *La migration grecque en Ionie*. Paris: Klincksieck.
———. 2009. *Ethne grecs à l'Âge du Bronze.* Paris: Diffusion de Boccard.
Schachermeyr, Fritz. 1937. "Pelasgoi." In *Paulys Realencyclopädie der classischen Altertumswissenschaft*, edited by Georg Wissowa, 252–6. Stuttgart: A. Druckenmüller.
Scheer, Tanja S. 2011. "Ways of Becoming Arcadian: Arcadian Foundation Myths in the Mediterranean." In *Cultural Identity in the Ancient Mediterranean*, edited by Erich Gruen, 11–25. Los Angeles, CA: Getty Research Institute.
Shapiro, H. Alan. 1998. "Autochthony and the Visual Arts in Fifth-Century Athens." In *Democracy, Empire and the Arts in Fifth-Century Athens*, edited by Deborah Boedeker and Kurt A. Raaflaub, 127–52. Cambridge, MA: Harvard University Press.
Smith, Anthony D. 2003. *Chosen Peoples.* Oxford: Oxford University Press.
Sourvinou-Inwood, Christiane. 2003. "Herodotus (and Others) on Pelasgians: Some Perceptions of Ethnicity." In *Herodotus and his World. Essays from a Conference in Memory of George Forrest*, edited by Peter Derew and Robert Parker, 103–44. Oxford: Oxford University Press.
Speiser, E.A. 1936. "The Name *Phoinikes*." *Language* 12: 121–6.
Van der Meer, L. Bouke. 1992. "The Stele of Lemnos and Etruscan Origins." *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheiden te Leiden* 72: 61–71.

18

THE TERRAIN OF AUTOCHTHONY

Shaping the Athenian landscape in the late fifth century BCE[1]

Jacquelyn H. Clements

It was good to have a stately temple building to provide orientation when in chaos and distress.

Burkert 1988, 39.

Introduction

Despite ongoing struggles with Sparta in the late fifth century BCE, Athens continued to undertake building projects related to the religious life of the *polis*, creating monumental works of architecture and imagery that expressed contemporary concerns. This activity was no more apparent than in the sanctuary of the Acropolis, a center of religious activity in Athens, where the small temple known as the Erechtheion was completed in the final decade of the fifth century BCE. As the last monumental temple to be completed on the Acropolis, the Erechtheion's iconographical motifs are worthy of further consideration for their interpretive potential in understanding the meaning of the Acropolis' topography and the identity of the city and citizens of Athens.

While the other building projects under the direction of Perikles had been undertaken in the years between the Persian and Peloponnesian Wars, the Erechtheion's late fifth-century finishing touches illuminate especially well the concerns of the Athenians during the Peloponnesian War. In particular, themes of autochthony, already in the visual repertoire of Athenian iconography in vase painting of the mid-fifth century, are brought to life on a monumental stage through the architectural sculpture of the Erechtheion, which depicted myths related to the history of Athens and her citizens. Although rarely discussed in detail in antiquity, and although not a substantial monument of interest in the great traveler's accounts of the seventeenth and eighteenth centuries,[2] the Erechtheion is of note in the history of architectural innovation. By incorporating the physicality of the landscape into its design and decoration, rather than simply leveling the land to make the space more ideal, the Erechtheion acknowledges and makes use of the very soil from which the Athenians were said to have been born.[3] The architecture of the temple not only emphasizes the features of the Acropolis' topography, but also incorporates them into the very identity of the temple itself.

This chapter situates the Erechtheion deeply within the topography upon which it was constructed, proposing that its placement was not only intentional, but integral to developing notions of Athenian identity in the late fifth century. Through the Erechtheion, Athenian identity was

embedded into the environment of Attica itself. Moreover, its sculptural adornment became the iconography through which these concepts were conveyed to an audience of worshippers and visitors to the Acropolis. As proposed first by Ludwig Pallat in a series of short articles in the early twentieth century, the sculpted frieze of the Erechtheion depicted myths of Athens' earliest kings, such as Erechtheus, who was the subject of a now-fragmentary contemporary play by Euripides, as well as Erichthonios, said to have been born from the Athenian soil and whose presentation to the goddess Athena was depicted after the Persian Wars in Attic vase painting.[4] Although the Erechtheion's frieze is quite fragmentary and fraught with difficulties in its precise interpretation, an analysis of its figures, collectively and individually, adds to a rich repertoire of late fifth-century architectural sculpture. By examining the Erechtheion from multiple angles, including its means of planning and construction, its iconographical significance, and its topographical importance in the Athenian landscape, its status as a monument of Athenian identity will become clearer.

Autochthony in fifth-century Athens

After the Athenian defeat of the Persians in 479 BCE, the citizens of Athens became captivated by the concept of autochthony. Autochthony, meaning to be "born of the earth," was utilized by authors such as Thucydides and Herodotus to explain indigenous peoples, as well as to emphasize how the Athenians had always lived in their own native land, unlike the Spartans.[5] The idea was not exclusive to classical Athens, but became a part of the revitalization of the city and was woven into its mythical and historical fabric after the Persian destruction. The Athenians developed early stories of their king Erechtheus, who had been born from the earth, which were found in Homer, establishing a relationship between the Athenians and their land as early as the eighth century BCE.[6] The narrative of Erichthonios, related to Erechtheus, also gained momentum, and his birth from the earth (*Gē*) after the unsuccessful pursuit of Athena by Hephaistos, made for a captivating story of origins.[7] In the fifth century, autochthony took on a new prominence in Athenian history, and it was used as a means of explaining Athens' rise to power after the Persian Wars.[8] Furthermore, a political dimension for autochthony was found in the historical event of Perikles' Citizenship Law in 451 BCE, which gave Athenian citizenship only to those children born of two parents who were citizens.[9] In effect, the establishment of the Citizenship Law restricted identity to a closed group determined by descent and ancestry.[10] The fifth century BCE thus demonstrated an increasingly complex understanding of what it meant to be an Athenian, reliant heavily on a mytho-historical background.

Autochthony has already been studied quite extensively from a literary perspective, particularly as it relates to two plays by Euripides, the *Ion* and the *Erechtheus*, both of which, like the Erechtheion, date to the late fifth century BCE.[11] Each tragedy addresses the over-arching themes of autochthony and identity that were present in the minds of Athenians in the late fifth century. For this reason, geography and topography are referenced frequently in each tragedy as a means of foregrounding the theme of autochthony;[12] the *Ion* oscillates between Delphi and references to Athens, and the *Erechtheus* is firmly situated on the Acropolis itself. From Euripides to vase painting, autochthony had both a verbal and a visual dimension, manifest in the language of the fifth century. It was also present in the topographical placement of monumental structures and their decoration within the landscape of Athens. Although vases related to the themes of autochthony have already been examined in detail,[13] there is a great deal of potential for the voice of a monumental architectural structure to elucidate further aspects regarding autochthony in Athens. The Erechtheion, where these myths of autochthony and Athens' early history were displayed on a monumental scale, serves as a nexus for our understanding of how the iconography of autochthony was strategically placed on the north side of the Acropolis on and within a site rich with earlier histories.

The Erechtheion in the fifth-century Acropolis: imagery and identity

By the time the Erechtheion began to take the form we see on the Acropolis today, its surrounding locale was already steeped in history and mythology. The two can be used interchangeably in discussing the way that fifth-century Athenians understood their own past. The emergence of myths in the Periklean building program, popular and particular to Athens itself, has already been discussed extensively by scholars.[14] These images of mythological history were incorporated into the architectural agenda of the Parthenon, the Temple of Athena Nike, and the various votive offerings presented by worshippers and participants in the Acropolis' festivals and religious rites. In time, the Erechtheion itself became almost a sort of 'museum of curiosities' for the collections of religious objects it displayed as well as several cult places that became integrated into its design.[15] Thus, it reflected contemporary concerns with the ongoing history of the Acropolis' function as a sanctuary and space for community religious ritual. The iconography of the Erechtheion, as we shall see, also illuminated a uniquely Athenian nature, one concerned with ancestral history and mythology.

Before the Erechtheion was constructed, earlier sites of religious importance were clustered in this area of the Acropolis. The area around the temple bears traces of Bronze Age occupation, not unlike elsewhere on the Acropolis but more concentrated. The range of interpretations for these remains has spanned suggestions from a Bronze Age palace[16] to a site of simple habitation,[17] but they nonetheless suggest a long-standing history of human occupation in this particular area of the Acropolis. In addition, the region had a rich literary tradition surrounding it. Herodotus refers to the Athenian hero-king Erechtheus (earthborn, of course) as having a shrine on the Acropolis, a *nēos*, to be exact, that included a pool of salt water that marked the spot where the struggle between Athena and Poseidon for the patronage of Athens took place.[18] Centuries later, Cicero also mentions such a shrine, writing that "if Amphiaraus and Trophonius are gods, unquestionably Erechtheus is one, whose shrine and priest we have seen at Athens."[19] The writings of Homer, Herodotus, and Cicero all suggest a long tradition of autochthony on the Acropolis that linked Erechtheus and his worship to this specific place. Although the exact location of this early shrine of Erechtheus is unknown, Clairmont and others suggested looking north of the Temple of Athena Polias for it, which would give it a location somewhere in the vicinity of the current Erechtheion, and evidence has shown that Erechtheus was one of several heroes and divinities who were worshipped in the classical temple.[20]

The area may have at one time consisted of a loosely defined sanctuary that incorporated even earlier cult places, such as the Kekropeion, the Pandroseion, and the archaic Temple of Athena Polias, and a sort of 'pre-Erechtheion' may have functioned as an older sacred space encapsulating these areas.[21] The issues of defining this area of the Acropolis also account for some of the difficulties embedded in the term 'Erechtheion' itself; only two sources refer to it as such, and the building accounts from the temple call it rather the "temple in which the ancient image is."[22] As such, some scholars have even argued that the temple to the north of the Parthenon is not actually the Erechtheion, which should instead be situated elsewhere.[23] Today, however, it is generally accepted that the late fifth-century temple seen to the north of the Parthenon is the Erechtheion, and it is best to avoid the possible polemics surrounding alternative terminologies.[24] In addition, throughout the following pages, we will see how the Erechtheion's unusual architecture is well suited to its meaning. Its placement in the landscape along with its iconography corresponded well to the ideas about Athenian identity that were communicated in its architectural sculpture.

A central focal point for autochthony: the architecture of the Erechtheion

The Erechtheion, situated along the north side of the Acropolis rock (Figure 18.1), is known for its incorporation of multiple earlier cult places that immediately imbued it with a sense of history, concentrated in an area rich with symbolism.[25] In this regard, the small, intimate temple pays homage to the history of the site from the beginning of the Acropolis' cultivation as a sanctuary. It caught the eye of both Pausanias and Vitruvius, who were attracted to its unusual architectural form.[26] In addition, it was built after the destruction of the older Archaic Temple of Athena Polias to the south at the hands of the Persians, but it was by no means meant solely as a replacement for that earlier structure.[27] Indeed, it was the last monumental structure to be completed on the Acropolis until the Roman period. The Erechtheion was, from the start, a temple that embodied a multitude of complex meanings from whatever angle it was viewed on the Acropolis and from below.

As an Ionic hexastyle, prostyle temple, the Erechtheion quickly became a hallmark of strange architectural choices. Studied first by Balanos and then by Paton and colleagues in the definitive monograph, the Erechtheion also underwent further restorations and studies late in the twentieth century.[28] Although Dinsmoor remarked that the irregular form of the temple must have been "not that which any architect could have desired,"[29] it does, in fact, appear to be quite harmonious and intentional in its design. Its foundations were built upon a number of existing earlier structures, and a wall running north-south within the cella divided the space into two, the "double building" (*diploun oikēma*) of which Pausanias spoke.[30] Hurwit suggests that the eastern room, slightly smaller than the western space, was where the cult statue of Athena Polias was located, as it was in this room that there were two windows for natural light.[31] Sourvinou-Inwood came to a similar conclusion, positing that the cult of Poseidon-Erechtheus and other associated cults were located in the western part of the cella.[32] Such careful divisions of the interior space of the Erechtheion delineated certain areas for certain cults, indicating that the temple had a multiplicity of uses that conformed both to the past uses of the site as well as the current religious trends of the late fifth century.

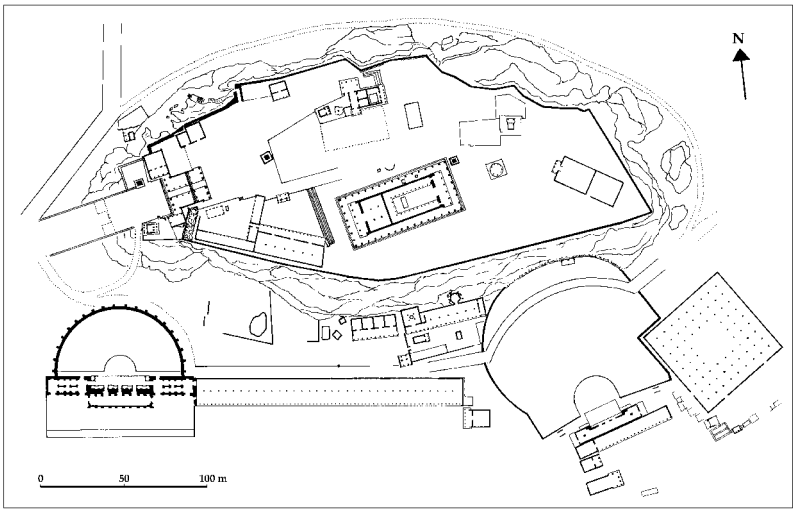

Figure 18.1 The Acropolis of Athens c. 180 CE (drawing: Hans R. Goette, 2001)

The Erechtheion's construction from multiple types of stone, including soft yellow poros, limestone from Aegina and Kara, and marble from Mount Pentelicon also surely gave it a multi-layered, textured look that encapsulated a quality of richness that was unparalleled elsewhere in classical architecture.[33] In addition, two of the three porches, which were built on the temple's south and north sides, may at first appear incongruous and unexpected, but actually work harmoniously with the landscape and surrounding structures; as Lawrence notes, the south porch "points like a blunt finger at the Parthenon," while the north porch "acts as a counterpart to the sturdy *pteron* by providing a flimsy, airy cluster of columns."[34] The placement of the porches was odd enough to make Vitruvius remark that the Erechtheion "placed on its sides what was normally reserved for the front;" a third porch, short in depth, accentuated the typically designed east side.[35] Each porch carried architectural sculpture; the south porch bore the famous *korai* (maidens), while the north and east porches were home to the Erechtheion frieze. The north porch, too, was connected to the mythological history of the Erechtheion; Jenkins notes that the opening in the marble-coffered ceiling "betokened the trajectory of the trident of Poseidon, or alternatively, the spot where Zeus sent a thunderbolt at the end of the contest between Athena and Poseidon."[36] These observations suggest that the architectural planning of the Erechtheion carefully considered the mytho-historic aspects of the site upon which the temple was built from its inception.

Figure 18.2 The Erechtheion, as seen from the Propylaia to the east, (photo: J. Clements)

The debate over how much the temple was planned as part of the Periklean building program is still open, and the architect is unknown. Usually, the start of the Erechtheion's construction is set to about 421 BCE, during the Peace of Nikias.[37] But firm evidence for the beginning of construction has been lacking, until recent research by Korres suggested that the date for the start of construction of the Erechtheion should be placed earlier, in the 430s.[38] With this in mind, a Periklean inception for the Erechtheion must now be considered, rather than the traditional late 420s date.[39] At the same time, Hurwit's rather conservative suggestion that the Erechtheion may very well have been planned in the mid-430s (though not constructed) as part of the original Periklean building program is also quite plausible;[40] after all, a new temple to Athena Polias was needed after the destruction of the Old Athena Temple by the Persians in order to maintain continuity of the Acropolis' older veneration of Athena.[41] In any case, and more pertinent to the discussion at hand, is the knowledge that we can gather from the Erechtheion's building accounts that the vast majority of the sculptural program of the temple was undertaken in the last two decades of the fifth century BCE, culminating in 405 BCE. The planning of the Erechtheion, concomitant with a desire to create a new Temple of Athena Polias while paying homage to earlier cult places is still worthy of consideration, whether as part of the Periklean building program or planned later in the spirit of continued construction on the Acropolis.

Given the complicated nature of the temple, its planning may have taken a significant amount of time as well, and changes could have been made to its iconographic scheme along the way. As it was, the iconography of autochthony, including the myths of Erechthonios and Erechtheus that were central to the Erechtheion's program, gained new ground after the Persian Wars and began to appear with increased frequency through scenes of the presentation of Erechthonios to Athena.[42] Regardless of the archaeological debates stemming from the stratigraphic difficulties of this area of the Acropolis, scenes from the myths of Erichthonios were already in circulation by the time the Erechtheion broke ground, whether it was in the early 430s or the late 420s. With the advent of the Peloponnesian Wars, however, these myths of autochthony gained deeper significance as part of Athens' heroic past, extolled yearly in the funeral orations during public burials for the war dead. Given what we know about the sculptural decoration of the Erechtheion, the temple's narratives fit impeccably within the specific context of time in which they were created in the last decade of the fifth century.

On the edge: the Erechtheion's location

Pausanias' passage identifying the Erechtheion (1.26.5–27) adds much to our knowledge of how the temple was situated within the sanctuary of the Acropolis and what treasures and illustrious objects were within it; he was less concerned with its architectural form.[43] As Pausanias made his circuit around the Acropolis, he described altars to Zeus Hypatos, as well as Poseidon, Erechtheus, Hephaistos, and Boutes, a local hero, indicating the presence of multiple figures of worship in the Erechtheion. These altars highlight lineages: Hephaistos, the 'biological' father of Erichthonios, as well as Zeus, the father of the gods, and Poseidon, who had a long association of his own to the area.[44] Paintings that graced the walls of the temple also emphasized familial ancestries, as they depicted the Eteoboutadai family from whom the priest of Poseidon-Erechtheus and the priestess of Athena Polias were chosen. The connection with Poseidon is also emphasized in Pausanias' discussion of the mark of a trident in the rock nearby, hearkening back to Poseidon's dispute over the land of Attica, and the sea water in a reservoir surely added a certain lore to the temple's history.

The elevations of the temple exist on multiple levels, emphasizing its complicated topography, while at the same time the Erechtheion correlates well to the surrounding landscape.

Both plan and elevation are explicably intended to be "unobtrusive counterweights"[45] to the nearby Parthenon, but these elements also interact with the landscape. Rhodes believes it was a conscientious decision not to level the site with fill before construction, and that the architects and designers sought instead to "express emphatically those irregularities" that were present in the topography of the site.[46] The landscape surrounding the temple was thus kept relatively intact, with the foundations of blocks dropping some three meters from the east to the west end of the building.[47] With this in mind, the Erechtheion's relationship to autochthony becomes nearly literal, incorporated into the very foundations, blocks, and physical structure of the temple:[48] as the Athenians themselves believed they were born from the earth, so too was this complex temple. Constructed at a time when Athenian identity was surely in question and their homeland felt insecure, the architects of the Erechtheion maintained the temple's connection to the earth, quite literally. As a central repository for the cult image of Athena Polias, the Erechtheion also functioned as a monument to a history old and new, housing not only the ancient image of Athena in a place with a long history, but also giving new life to the iconography of autochthony through imagery related to the earliest ancestors of the Athenians.

The iconography of autochthony: the Erechtheion's architectural sculpture

Although the beginnings of its manufacture have not been decisively determined, the final stages of the Erechtheion's construction have been long understood, thanks to a number of building accounts that were set up after work on the temple resumed in the last decade of the fifth century BCE.[49] More than a hundred workmen contributed to the building. The contributions of these workers to the temple's construction were not limited to architecture, however, but also its sculptural decoration; identifying craftsmen was not a particularly common practice in antiquity, apart from the names of famous sculptors, and thus the Erechtheion stands out in our knowledge of sculptural agency.[50] These inscriptions are rare amongst Athenian building accounts in terms of their length and level of description. For the most part, they focus on the final years of the Erechtheion's construction from 409 to 407 BCE, a *terminus ante quem* for the Erechtheion's completion; these dates correspond to the resurrection of construction after a lull in work that occurred during the Peloponnesian War, often thought to be a consequence of the disastrous Sicilian expedition of 415 to 412 BCE. As the building accounts deal with a work that was already largely in process, they consequently do not inform us much about issues such as quarrying, transportation, or even architectural planning.[51] Thus they are not much help in determining how the frieze was planned in terms of its iconography, and what changes may have been made to the sculptural program of the Erechtheion over time; it is only the final design with which we have to base our understanding of the temple and its functions.

In antiquity as well as today, the Erechtheion was visually captivating not only due to its architectural form but also its sculptural adornment. Decorative architectural elements impart a sense of elaborateness to the temple; however, sculpture is also missing in places where we would expect to see it, such as the pediments of the main cella and the north porch, and there is little evidence for floral *akroteria*.[52] The following sections consider the two dominant forms of architectural sculpture at work in the Erechtheion: the frieze and the six *korai*. From the perspective of the topographical location of the temple to the potential narrative structure of the frieze, both iconographical aspects of the Erechtheion, the frieze and the *korai*, are related to autochthony and Athenian identity. Although the Erechtheion frieze has occasionally been overlooked by scholars,[53] its interpretive potential can add a great deal to

the study of autochthony, particularly on a monumental scale and at the center of Athens' most important sanctuary.

The Erechtheion's *korai:* topographical implications

Six maidens, or *korai*, stand erect, supporting the roof of the south porch of the Erechtheion,[54] and have long captured the attention of visitors to the Acropolis. Today, five of them are located in the New Acropolis Museum, having undergone recent restoration, while one is located in the British Museum. The casts *in situ* on the Erechtheion's south porch still give a good sense of how the originals were aligned and oriented to the south. Their place in the landscape of the Acropolis is important for the understanding of autochthony within the Acropolis' topography, as they face the Parthenon, visually uniting the two most important temples on the Acropolis.

Although usually referred to as "caryatids," the term *korai* (maidens) is perhaps more accurate for the most famous of the temple's architectural features,[55] and is the ancient term used in the Erechtheion's building accounts, devoid of the associations first used by Vitruvius that aligned them with a probably unassociated myth.[56] Typically dated to about 420 BCE, before the interruptions in building activity and the sculpting of the Erechtheion frieze, the maidens of the temple are dressed in heavy drapery, their folds resembling the fluting of the Parthenon's columns directly within their line of vision.[57] Although graceful, they are simultaneously stocky and denote a certain heaviness.[58] While each appears to be identical, upon closer examination subtle differences in facial features, drapery folds, and other characteristics begin to emerge.

A pertinent point of departure for discussing the *korai* of the Erechtheion is their location in the landscape of the Erechtheion, and by extension, the Acropolis as well. Kontoleon and others sought to acknowledge them as integral to the function of the south porch, interpreted as a *heroön* for the space associated with the Tomb of Kekrops, a place that may have been its own sort of commemorative monument.[59] Their function as part of this *heroön* has also been used to theorize that the *korai* had a funerary function, evidenced in part by the dedicatory *phialai* that they carry, and that they may have served as physical markers of the chthonic elements connected to one of Athens' earliest kings.[60] In this regard, their archaizing features would have also served them well.[61] The *korai* therefore physically look to both the past in their style as well as the future as their gaze is directed towards the Parthenon and the new topographical arrangement of the Acropolis, which was developed after the Persian Wars, a landscape that was so concerned with Athens' mytho-historical past.

In addition, the south porch of the Erechtheion was also built on the foundations of the Old Temple of Athena, marking a strong visual continuity between place and space. It may also be possible to connect the Erechtheion's *korai* to a category of libation-makers, and perhaps even relate them to the scenes on the Erechtheion frieze. The *phialai* which they carry recall figures who make libations as witnesses to the presentation of Erichthonios depicted in vase painting, such as Zeus on a red-figure stamnos in Munich, as well as Kekrops, who appears on a rhyton attributed to the Sotades Painter in the British Museum and a calyx-krater in the Schloss Fasanerie.[62] In this regard, the *korai* act as participants in the central scenes of Erichthonios' presentation to the goddess Athena, as was depicted on the frieze, and need not have the funerary connotations suggested by Scholl.[63] As pendants to the figures of the Erechtheion frieze, then, the *korai* are thus engaged in the environment of both the Erechtheion and the Acropolis as a whole, creating a visual dialogue between temples, space, and the relationships between viewing and the gaze. They are, effectively, active participants in witnessing the ongoing events of the religious space of the Acropolis.

Monumental autochthony: the Erechtheion frieze

The Erechtheion frieze is unique among Ionic friezes, employing a technique that has few parallels and never became a popular method of construction. Individual figures, slightly under a meter in height, were carved in marble in the round and attached to the frieze via dowels.[64] The entablature, crafted of a dark blue Eleusinian limestone, stood in stark contrast to the figures, perhaps to replicate the paint that was often applied to the background of friezes (Figure 18.3).[65]

The building accounts (*IG* I^2 374) collectively provide a great deal of information about the payments for individual figures, and their late date of 408/7 BCE suggests that the iconographical adornment was saved until near the completion of the temple. The sculptures which constitute the Erechtheion frieze are clearly recognizable as dating to the late classical style: female figures wear flowing, heavy drapery, while their poses exhibit movement and energy.[66] Most are carved separately from one another, and although the building accounts discuss mostly male figures and youths, many of those preserved are female, including a number of children, and several figures even overlap, such as Figure 18.4, where one figure kneels in front of another.[67] Although all carved in a similar style, the building accounts as well as the stylistic analysis of Patricia Neils Boulter helped to determine that there were multiple hands at work in carving these figures.[68]

While the frieze has been studied from several perspectives, such as the sculptural techniques of the artisans who created it,[69] it has not been thoroughly considered from the broader perspective of narrative sculpture in the high and late classical periods and as a reflection of contemporary ideals and concerns. After all, the frieze is highly problematic, as the majority of the remaining figures are fragments of upper and lower torsos, and it is difficult to reconstruct more than a handful of figures.[70] In addition, the unique construction of the frieze, whereby individually carved figures were attached to a background entablature by means of dowels, makes reconstruction particularly difficult. The reasons for this technique were unknown, although it may have been economical,[71] but whatever the impetus for this unique construction, it served to both create a unique display of iconography as well as today complicate our

Figure 18.3 The Erechtheion frieze on display in the New Acropolis Museum (photo: J. Clements)

Figure 18.4 Two overlapping figures from the Erechtheion frieze. Acropolis Museum, Akr. 1073 (photo: J. Clements)

understanding of the Erechtheion frieze's narrative structure. Yet much can still be said about the style, poses, and genders of the figures, and this in turn can aid our understanding of the meaning of the imagery of autochthony on a more monumental scale.

More than a century ago, the German scholar Ludwig Pallat suggested that the frieze of the Erechtheion represented scenes from the birth of Erichthonios.[72] His studies centered on the frieze from the North Porch,[73] and by carefully measuring the heights of various figures and the placement of the dowel holes, he devised a reconstruction drawing of this section of the frieze that included myths such as Erichthonios' presentation to Athena, which was known from vase painting.[74] Although quite liberal in his suggestions of various characters and their arrangements, Pallat's analysis of the dowel holes in the entablature and his suggestions for matching up the fragments to it led to a number of noteworthy suggestions. In accepting Pallat's theories that the frieze depicted scenes from the myths of Erichthonios, this in turn highlights the Erechtheion as a monumental example of Athenian visual engagement

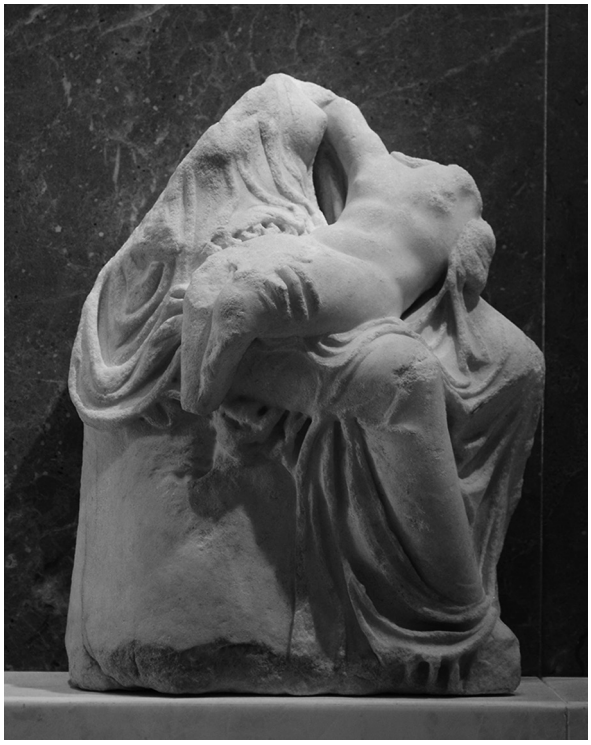

Figure 18.5 Seated female figure holding a child in her lap from the Erechtheion frieze. Acropolis Museum, Akr. 1075 (photo: J. Clements)

with their ancestral roots. To this iconography, then, we can most likely also add the myths of Erechtheus, who by the fifth century was clearly deemed to be a separate figure from Erichthonios; Erechtheus was usually depicted as a full-grown man, while Erichthonios was always visualized as a child or baby.[75]

Hurwit suggests that a woman who holds a small male child in her lap (Figure 18.5) "naturally makes one think of (or hope for) Athena and Erechtheus/Erichthonios, but there were other such mother-child-groups, so the identification is weakened."[76] Indeed, there are at least three groupings of seated women with children on their laps, including one published recently by Brouskari, and they might be identified as *kourotrophoi*, but this does not necessarily diminish the argument that Erichthonios and Athena were present together on the frieze.[77] In addition, the term *kourotrophos* could also be applied to divinities such as Ge, and *kourotrophoi* may have been part of the composition of the west pediment of the Parthenon;[78] several *kourotrophoi* on the Erechtheion frieze might refer to the nurturing aspects of the myths of Erichthonios. Furthermore, the iconography of Athena and Erichthonios never shows her actually holding the child; instead, in vase paintings, he is always depicted in the transitional state of being handed from Ge to Athena, already born from the earth and coming under the protection of Athens' patron goddess.

The daughters of Kekrops might also be expected to be a part of the Erechtheion frieze, and several of the female figures bear a resemblance to those found from the *akroteria* of the Temple of the Athenians at Delos, dated to 425–417 BCE and of a similar size and style to our frieze.[79] Pallat also made room for figures such as Ge and Kekrops, as well as a kneeling figure

Figure 18.6 Group of horses and a male figure from the Erechtheion frieze, Acropolis Museum, Akr. 1235 (photo: J. Clements)

of Pandrosos, waiting to receive the baby Erichthonios from Athena.[80] We might also look for the daughters of Kekrops to be slightly removed from the scene of Erichthonios' presentation, watching as spectators as they do on such vases as the Meidian squat lekythos in Cleveland.[81] Often regarded as personifications, such spectators could also be considered Athenian ancestors, as Boulter saw in the pedimental sculptures from the Parthenon's west side; these, too, might have been part of the Erechtheion's iconography.[82] Horses, too, would also have been present on the Erechtheion frieze, as Pallat established, based on the fragments of several groups of horses, such as in Figure 18.6.[83] This horse group is reminiscent of a scene on the lid of a pyxis attributed to the circle of Meidias, excavated in Athens and dating to the late fifth century BCE, in which a team of horses, driven by a Nike figure, is partially preserved.[84] This pyxis is particularly relevant, as it illustrates the two central myths of Erichthonios on one vase. The lid of the pyxis, albeit quite damaged, shows traces of Erichthonios' name and Athena's helmet, indicating the birth scene. The body, on the other hand, depicts the daughters of Kekrops, who flee from the scene when the basket containing Ericthonios is opened. A paratactic scene that wraps around the surface of the vase, the Meidias pyxis is quite close to the Ionic format of the Erechtheion frieze, and indeed, female figures in motion from the frieze could very well be interpreted as the daughters of Kekrops (Figure 18.7).

A number of small finds that emerged from the excavations of Oscar Broneer on the North Slope of the Acropolis in the 1930s also add insights to our understanding of the Erechtheion frieze.[85] A small Corinthian helmet, studied by Kevin Glowacki, is of particular note (Figure 18.8). Carved in the round, its smooth bottom indicates it rested on a flat surface, such as the shelf-like ledge of the Erechtheion's entablature. As an iconographic motif, the helmet is similar to those seen in images of warriors in the process of arming or disarming, a motif that occurs commonly in Attic vase painting.[86] Glowacki, however, suggested that the helmet may instead belong to Athena, who in other sculpted reliefs and friezes is sometimes depicted holding a helmet in her hands, on her lap, or by her side.[87] Placing Athena within the iconography of the Erechtheion frieze and its themes of autochthony reminds us of images of the presentation of Erichthonios in which Athena

Figure 18.7 Female figure in flight, from the Erechtheion frieze, Acropolis Museum, Akr. 2825 (photo: J. Clements)

Figure 18.8 Corinthian helmet from the Erechtheion frieze, Acropolis Museum, Akr. 7236 (= AS 196) (photo: J. Clements)

Figure 18.9 The Presentation of Erichthonios. Attic kylix by the Codrus Painter (Antikensammlung, Staatliche Museen zu Berlin—Preussischer Kulturbesitz, F 2537)

is without her helmet, such as a stamnos in Munich attributed to the Painter of Munich 2413, dated to about 470–460 BCE, or a kylix by the Codrus Painter in Berlin of about 440–430 BCE (Figure 18.9).[88] In these images, Athena's matronly aspects are emphasized, rather than her martial nature, which stands in contrast to other images of the goddess on the Acropolis. Her close connection to the citizens of Athens, for whom the city was named, cannot be ignored,[89] and she most likely would have had a prominent position on the Erechtheion's frieze, as she was present in the Parthenon as well.

Bringing the fragments together: The Erechtheion frieze as a model of autochthony

Although these fragments by no means cover the entire span of possible interpretations of the Erechtheion frieze, they give further weight to Pallat's original theories regarding the meaning of the frieze. While it is helpful to single out particular fragments for individual analysis, it can also be fruitful to consider the Erechtheion frieze as an entire monument, particularly given the difficulties of its reconstruction. Regardless of the precise order of the fragments in their original display, the sculpted figures are analyzed for their collective qualities as representative of Athenian concerns with the myth of autochthony during this time period. Apart from Pallat's studies, most scholars have not attempted to look at the various fragments in order to propose a unified theme or themes, as would be expected for an Ionic frieze, but Felten proposed a theory quite radical from others: that the Erechtheion frieze had elements of a procession, not unlike the nearby Parthenon frieze, and might be connected to the Skira, an Athenian festival with close ties to Demeter and Kore.[90] While potential connections to the Erechtheion are clear—during the festival, the priestess of Athena Polias and the priest of Poseidon Erechtheus were escorted under a canopy (*skiron*), carried by the Eteoboutadai, for example[91]—the iconography lacks the strong parallels that are found in the myths of Erichthonios and Athenian

autochthony, and the Erechtheion frieze is better suited to mythological scenes that would have resounded with other mytho-historic themes on the Acropolis.

Many of the figures from the Erechtheion frieze also closely resemble those of late fifth-century vase paintings that depict women as personifications, particularly those from the Meidias Painter and his workshop mentioned above. These women in particular come to dominate scenes of the presentation of Erechthonios, even more so than deities, and a number of them have political and civic connotations. A squat lekythos in Cleveland dated to about 420–410 BCE, for one, shows Ge's presentation of the baby Erichthonios to Athena, surrounded by a host of female characters.[92] Three of them are most likely the daughters of Kekrops, while the others may be personifications related to the Athenian political sphere.[93] Lorenz notes how some of the women face the main scene, while others interact with one another, helping to "generate a spatial effect in the picture as well as to establish multiple links of visual and actual communication between the figures";[94] the same analysis can be applied to the figures of the Erechtheion frieze, regardless of their original order. Ge is particularly interesting in this scene as well; whereas in other vases she appears half-revealed from the ground, in the Meidias squat lekythos, she is instead seated, holding Erichthonios in her lap as he reaches towards Athena. Ge here resembles several of the seated women from the Erechtheion frieze, perhaps even one of those who hold children in their laps, as discussed above.[95]

In addition, late fifth-century vases with the presentation of Erichthonios to Athena had a particular attraction towards the depiction of landscape elements, which can be seen in several instances, such as the olive tree that is alongside the basket containing Erichthonios on the calyx-krater in Eichenzell, situated between Kekrops and Athena, or the hints of an olive tree that surrounds Erichthonios' opened basket on the Meidian pyxis. While topographical indicators have yet to be associated with the Erechtheion frieze, the architectural form of the temple itself denotes a sense of interest in the topography of the surrounding landscape. The appearance of landscape details in late fifth century vase painting might also be an indicator of the Athenians' special interest in the relationship between autochthony and the terrain of Athens. Alan Shapiro, for one, has suggested that that the appearance of the olive tree in the Eichenzell calyx-krater is a clear marker that the scene takes place on the Acropolis.[96] This gives firm evidence for a specific locale connected with the concept of autochthony, and by placing autochthony on the Acropolis, the suggestion further underscores the close associations between autochthony, myth, and topography that was integral to the Erechtheion's construction.

Topography and autochthony: the Athenian landscape

The oft-quoted lines of Praxithea's speech in the *Erechtheus*, "we are a race not gathered out of foreign lands, but born from this soil,"[97] emphasize that the Athenians were not only native to the land they inhabited, but *this soil* (i.e., Athens) in particular. The themes of autochthony that were incorporated into the Erechtheion's frieze, in particular, function visually much the same way as the language of Euripides, giving prominence to a particular place embedded within Athenian history and its landscape. In this regard, the architects and sculptors of the Erechtheion were able to create on a large scale a kind of "history without historians,"[98] grafting a visual dialogue of identity into the monumental architecture and the environment of the Acropolis. One approach to tackling the themes and iconography of the Erechtheion has been to compare the figures of the frieze to some of those that occur in vase painting, searching for stylistic and thematic comparisons. This is particularly true for

vases that were unknown to Pallat at the time of his publications, such as the kylix by the Codrus Painter and the Meidian pyxis, as discussed above. In undertaking this approach, we add another dimension to the Erechtheion's position as a temple unique in both architectural form and in narrative sculpture.

With a more thorough understanding of the iconographic scheme of the Erechtheion, it is possible to situate the small but engaging temple within the landscape of the Acropolis more fully. Nowhere more apparently than in the architectural sculpture of the Erechtheion does the theme of autochthony emerge as a primary iconographic motif on the Acropolis during the late fifth century BCE. Although fragmentary today, and no longer *in situ*, the subject of the Erechtheion frieze surely stood out in the landscape of the Peloponnesian War and its aftermath as a commentary on the Athenian roots in the earth from its beginnings, traced all the way back to Homer and the early history of Athens. The themes of autochthony that played out against the dark background of Eleusinian limestone constituted a narrative that was steeped in Athenian mytho-historical ancestry, comparable to the Temple of Athena Nike's blending of deities and recent historical events at Marathon, as well as the Parthenon's focus on a contemporary festival that was witnessed by the gods.[99] If we accept the Erechtheion as part of the Periklean rebuilding program of renewal on the Acropolis that arose alongside the rebuilding of the Athenian Agora and other monuments in the wake of the Persian destruction, the Erechtheion still fits into a trend of replacing earlier structures into a new conception of architectural space.[100]

Saxonhouse argues that in the *Ion*, Euripides "forces the citizens of Athens to look critically at the Athenian myth of autochthony, not so as to make them question whether their first ancestors were indeed born from Athenian soil, but rather to make them reflect on the implications of such a myth."[101] In doing so, Athenian citizens were able to confront their beliefs about their origins, and understand better their sense of being in and a part of the predominant *polis* of Greece. The same can be said for the Erechtheion frieze, the viewing and interaction of which, within the landscape of the Acropolis, visually provoked reflection and brought the myths of autochthony to a narrative stage on the Acropolis during the Peloponnesian War. The melding of landscape and iconography in this concentrated location on the Athenian Acropolis provided a locale for contemplation and observation regarding the myths central to Athens' history and the core of its identity, born not just from the generic earth, but from the Attic land in particular, perhaps even the Acropolis, and nourished by the continuity of history, myth, and ancestry.

Spatial qualities of autochthony: conclusions

In the preceding pages, I have sought to demonstrate how the Erechtheion is a paradigm for the study of autochthony on a monumental scale, conspicuously and deliberately placed within the Athenian landscape at the core of Athens' visual concept of identity. As Stafford has observed, "visual representations act as something of an index of a myth's acceptance into the popular tradition."[102] This is no better seen than on the Athenian Acropolis, where the myths of the Erechtheion mark the culmination for the display and communication of the myth of autochthony. As in contemporary Attic vases that depicted scenes of the presentation of Erichthonios, the Erechtheion imparted ideas about Athenian identity through the medium of architectural sculpture that were balanced with other themes on the Acropolis. Standing at the nexus of a number of events and physical spaces, the Erechtheion's location on the north side of the Acropolis provided it with a strategic location for Athens' mythical history to be enunciated from multiple viewpoints within the topography of Athens. Jeffrey Hurwit has noted that, along with the Parthenon, it created an interplay of attention between various cult places of

importance on the Acropolis.[103] In a way, the Erechtheion frieze brought to fruition the commemorative and nostalgic aspects of the highly organized Acropolis into a unified location.

After the Persian wars, the Athenian Acropolis became fertile ground for reflecting on the endurance of the Athenians. This was elaborated in the conspicuous display of commemorative elements that both emphasized the importance of the memory of war as well as the ability of the Athenians to prevail.[104] As the architectural elements from the older Parthenon tower over the north side of the Acropolis, functioning as a memorial to the Persian Wars, it is curious to note the predominance of the Erechtheion, and in particular its north porch, as seen from the Agora (Figure 18.10). The temple would have been in close visual alignment with the Agora's Monument of the Eponymous Heroes, which took shape during the fifth and fourth centuries BCE.[105] Erechtheus, who was promoted to a civic hero in the ten *phylai* established in the reforms of Kleisthenes in the late sixth century BCE,[106] was present in this monument, as were other Athenian ancestors. Thus the civic nature of the Eponymous Heroes in the Agora was contrasted with the religious nature of Erechtheus on the Acropolis high above, providing autochthony with multivalent meanings in both Athenian religious and political life.

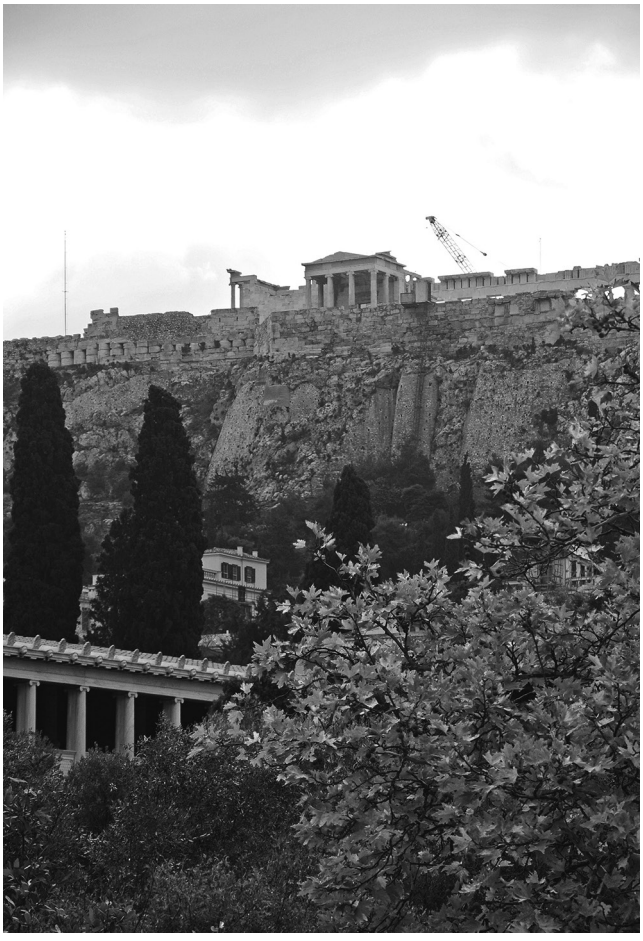

Figure 18.10 View of the North Porch of the Erechtheion from the Panathenaic Way in the Athenian Agora (photo: J. Clements)

Moreover, the Erechtheion frieze created reciprocity between the religious space of the Acropolis and the civic space of the Agora beyond the Eponymous Heroes monument. In the later fifth century, at the same time as the Erechtheion's construction, themes of autochthony extended beyond the Acropolis. Julia Shear has recently demonstrated the changes in the Athenian Agora in the last decade of the fifth century and into the fourth, when the focus of building activity shifted back from the Acropolis to the Agora.[107] Reaching back into the fifth century as well, the Erechtheion's completion was just about fifteen years after the finishing touches were placed on the Hephaisteion, where another image of autochthony was depicted. The presentation of Erichthonios was most likely illustrated on the cult statue base of the Hephaisteion. Although no traces of it survive today, it exists in Roman copies found in relief.[108] The myth of autochthony was thus represented in both the exterior of the Erechtheion as well as the interior of the Hephaisteion, emphasizing the importance of this myth in two major Athenian temples of the latter part of the fifth century BCE.

Spatial relationships and their deliberate construction within the classical Athenian landscape is quickly becoming a topic for further research, and the Acropolis is a rich example for study. Innovative research has shown the correlation between the architecture of the Acropolis and astrological alignments for understanding Greek festivals, for example.[109] Closer to the ground, Samantha Martin-Mcauliffe and John Papadopoulos have also recently studied the alignment of the classical Propylaia, arguing that its orientation towards Salamis embodies aspects of commemoration, manifest in the deliberate architectural construction that considers the topography and the landscape of the Athenian victory that took place there.[110] In addition, Thakur looks ahead and beyond the classical period to study how the construction of identity in Roman Athens can be seen in the Augustan Temple of Roma, heavily influenced by the Erechtheion.[111] Each of these studies attests to the potential implications for more in-depth understanding of visual and spatial relationships at the center of Athens' religious life, and the new consideration of the Erechtheion proposed here, with its strategically placed architecture and narrative sculpture, contributes to these analyses.

The myths of Erichthonios, Erechtheus, and the role of the gods and mortals in their stories of the nature of autochthony clearly depict a particular narrative that was central to Athenian history: that the Athenians saw themselves as closely tied to their ancestral origins, so much so that this narrative became part of not only the iconography of Athenian vase painting, but also of monumental sculpture. Susan Lape points out that there is a history itself to autochthony in Athens; that it was not seen as a static concept and that it "came to mean different things at different times and in different contexts."[112] Throughout the course of the fifth century BCE, the myth of autochthony grew in complexity, and with it, the visual and literary dimensions of it became more elaborate as well. Vases portrayed multiple figures engaged in the viewing of the presentation of Erichthonios, while Euripides' tragedies of the *Ion* and the *Erechtheus* explored the myth from new dimensions, including Athens' role as an imperial *polis*.[113] In the midst of this, the Erechtheion displayed the myth of autochthony on the paratactic entablature of its Ionic frieze, unveiling its story for citizens and visitors to the Acropolis to interact with and consider their own autochthonous roots from the Attic earth.

The Erechtheion falls squarely into a long line of images of autochthony during the fifth century BCE, but differs from other examples, such as vase painting, by virtue of its ability to communicate the mythical history of Athenian ancestry on a large and prominent scale. Completed at the height of the Peloponnesian War, when Athens' very land (and thus, its source of sustenance and the root of its most important histories) was threatened by the Spartan invasion, its iconography surely spoke to viewers who were aware of the precarious risks that threatened them.[114] The Erechtheion's architects and artisans utilized a wealth of sources

in its varied materials and complex imagery to link the Erechtheion to the earth in the most literal ways possible, from the architectural construction to its iconography. The Erechtheion's prominent position on the north side of the Acropolis incorporated earlier places of cult into its architectural form, fusing man-made elements with the natural landscape into one cohesively manipulated architectural monument that paid homage to the land around and below it, the very soil from which the Athenians themselves claimed to be born.

Notes

1 This chapter is an outgrowth of sections of my doctoral dissertation, entitled "Visualizing Autochthony: The Iconography of Athenian Identity in Late Fifth Century BCE," completed in 2015.
2 For observances on this phenomenon, see Lesk 2004, 259–60.
3 Rhodes (1995, 134), who states that "the architect of the Erechtheion . . . emphasized the intricate mythological narrative associated with the natural features in that area of the Acropolis."
4 Pallat 1912, 1935, 1937.
5 Her. 1.56–8; 7.161. Most recently, see Pelling 2009. On the development of the various uses of the term "autochthony," see Rosivach 1987. See also Kennedy and Kaplan, this volume.
6 *Il*. 2.547–8 and *Od*. 7.81. See also Parker 1986, 193.
7 For an overview of the autochthony myth and its variations, see Gantz 1993, 233–41.
8 Rosivach 1987 and Shapiro 1998.
9 Plutarch, *Life of Perikles* 37.1–5. For more discussion, see Ogden 1996, 166, Lape 2010, 17f., and Kennedy 2014, 14–20.
10 Hall 2002, 204.
11 See, for example, Saxonhouse 1986, Zacharia 2003, Valdés Guía 2008, and Kennedy this volume. Scholarship has been primarily restricted to the *Ion* as the *Erechtheus* is so fragmentary.
12 For themes of geography in Greek tragedy, broadly speaking, see Kennedy 2006 and Kennedy 2013.
13 Kron 1976 as well as Shapiro 1998, who covers the vase paintings that depicted the birth, or presentation, of Erichthonios from Ge to Athena.
14 See Boedeker 1998, as well as Hurwit 1999 and 2004 for overviews.
15 I thank Dr. Michael Lane for this terminology, which is particularly apt for the small treasury-like temple. The plethora of objects compiled by Harris (1995) suggests that the Erechtheion was a well-organized repository for many richly varied votives and dedications.
16 Holland 1924.
17 Iakovides 1962, Bundgaard 1974 and 1976, and Hurwit 1999, especially 67f.
18 Her. 8.55.2–5. Herodotus makes a point to emphasize the very *Athenian* nature of this myth.
19 Cic., *de Natura Deorum* 3.49: ". . . sed si sunt i di, est certe Erechtheus, cuius Athenis et delubrum vidimus et sacerdotem."
20 Clairmont 1971, 474. Clairmont wished to connect the construction of the Erechtheion as a tool for dating Euripides' play, the *Erechtheus*, to 421 BCE; see n. 37 below.
21 See Hurwit (1999, 145), Fig. 115. Regarding the Pandroseion, see Hurwit 2004, 172.
22 Pausanias 1.26.5 and Pseudo-Plutarch, *Decem Oratorum Vitae, Lykourgos* 843E. See also *IG* I^3 474.
23 Jeppesen 1987, who theorized that the Erechtheion belonged more in the vicinity to the northeast, closer to the Acropolis' north slope. An overview is provided by Hurwit 2004, 166–7.
24 Suggested by Lesk 2004, 7.
25 Most recently, see Meyer 2014.
26 Pausanias 1.26–7; Vitruvius, *De Arch*. 4.8.4.
27 Hurwit 2004, 168. Ferrari 2002 proposes that the old temple was conscientiously left in ruins.
28 Balanos 1938; Paton *et al.* 1927; Papanikolaou 1994 gives the most recent summary of the Erechtheion's condition in light of the broader scope of restorations on the Acropolis.
29 Dinsmoor 1950, 190.
30 See the reconstructions in Travlos 1971, Fig. 278 (elevations) and Fig. 280 (plan).
31 Hurwit 1999, 203.
32 Sourvinou-Inwood (2011, 73) and also expressed by Rhodes 1995, 131.
33 See Paton *et al.* (1927, 181) for more information on the types of stone utilized in the Erechtheion's construction.
34 Lawrence 1996, 123.

35 Vitruvius, *De Arch*. 4.8.4
36 Jenkins 2006, 122.
37 Boersma 1970, 86–7. Boersma refers to this period as "breathing space in which an economic revival was possible." In addition, this date has been hypothesized because there is no mention of the Erechtheion (or the "temple on the Acropolis in which the ancient image is," for that matter) in the Kallias Decree of 434/3 BCE, nor is it included in Plutarch's list of Periklean building projects. See Hurwit 1999, 158 and 2004, 173. Others, such as Clairmont 1971, have sought to link the Erechtheion's inception to the date of the composition of Euripides' *Erechtheus*, which also has been assigned a date of about 421 BCE without much historical basis.
38 Korres 1997b suggests a date earlier than has traditionally been accepted based on the reuse of unfluted column drums from the Old Propylon in the north wall of the Erechtheion.
39 Korres' proposal is corroborated by Goette (2001, 28). A similar conclusion was reached by Dix and Anderson; they proposed that a decree of the Eteocarpathians, re-dated to c. 445 to 430 BCE, helps also to set a confirmed date for the Erechtheion's construction (Dix and Anderson 1997, 2004). Julia Shear (2007, 94 no. 8) argues that the planning of the Erechtheion as part of the Periklean building program is unlikely, since it is not aligned with the other major Acropolis temples.
40 Hurwit 1999, 158.
41 Paton *et al.* 1927 (465–78) were the first to propose that the Erechtheion's primary function was a repository for the image of Athena Polias. For more on the cult statue of Athena Polias, a *xoanon* probably constructed of wood, see Platt (2011, 92 and *passim*).
42 See Shapiro 1998, who traces the development of this scene in vase painting. I argue that the scene of the "birth" of Erichthonios should instead be read as a presentation scene of the child to Athena by Ge.
43 Hurwit 2004, 164.
44 Although the altars have long disappeared, thrones have been found of the priests of both Hephaistos and Boutes; they are inscribed with fourth-century BCE letterforms. See Paton *et al.* 1927, Fig. 206.
45 Lawrence 1996, 120.
46 Rhodes 1995, 140.
47 Jenkins 2006, 121.
48 As Rhodes (1995, 140) states, the plan and elevations of the Erechtheion "are the architectural expression of the complex aggregation of myths, of narratives that surround the foundation of the city of Athens."
49 The inscriptions outline the report of a commission organized in 409/8 BCE with the goal of finishing the temple and include an inventory of all finished and unfinished blocks around the temple. The Erechtheion's building accounts (*IG* I^3 474) are covered comprehensively in Paton *et al.* 1927, 277–422, and have been studied most recently by Pakkanen 2006. The longest section is referred to as the "Chandler Stele," and is now located in the British Museum (GR 1785.5–27:1). According to the detailed records for the building project, the architects of the Erechtheion were paid the same as other skilled workmen, and provided a varied work force. See Coulton 1977, 27; Dinsmoor 1984, 3. The payments received of one drachma per day was, Coulton notes, equivalent to other workmen in contemporary Greek sanctuaries. Of about 110 workmen who helped construct the Erechtheion, slaves accounted for more than twenty percent of the workforce, and a large number of *metoikoi* were present as well, more than fifty percent. See Hurwit 2004, 173. Epstein 2008 reflects on the reasoning for the use of metics far more than slaves, suggesting that slaves were a more risky economical choice. See also Schumacher 2001, 131–6.
50 Hurwit 2004, 178. Epstein 2013 discusses the builders of the Erechtheion in more detail.
51 Epstein 2013, 135.
52 Paton *et al.* (1927, 359–62) discusses the work on the pediments as evidenced from the building accounts of the Erechtheion. Ridgway (1981, 62) suggests that the temple may have had *akroteria*, but there is little evidence for them.
53 See, for example, Ridgway (1981, 93–4), who says that nothing can be said of the composition "except that groups exist." Psarra (2004, 92) mistakenly states that the scenes of the Erechtheion's frieze do not survive.
54 These foundations are built upon those of the earlier Old Athena Temple, incorporating earlier history into the present landscape.
55 Although by far the most famous of such architectural supports, the *korai* of the Erechtheion were not the first of their kind, and some scholars suggest that they may have had their origins in the Near East and in Egypt. For an overview, see Schmidt 1982, 33–48. In Greece, they first appeared in the Siphnian

Treasury at Delphi, and literary accounts suggest that *korai* were also present at the Knidian Treasury. Shear 1999 suggests that the Erechtheion *korai* were copied from these early examples at Delphi, which were of Ionic and Aeolic forms influenced by ties with Anatolia and older, more primitive forms of the standing female architectural supports. The fame of the Erechtheion *korai* carried throughout antiquity as well, as they were copied and referenced in numerous other monuments such as the caryatids at Hadrian's Villa at Tivoli or, closer to home, those used in the propylon of Appius Claudius Pulcher at Eleusis. Recently, Margaret Miles (2012) has argued that the presence of *korai* as architectural elements at Eleusis evoked processions such as the Panathenaia and the Eleusinian festivals, an intriguing suggestion that acknowledges the role that the *korai* played in the spatial landscape; the Erechtheion's *korai* may have acted in a similar capacity with festivals that took place on the Acropolis.

56 Vitruvius (*De Arch*. 1.1.5) attempted to relate the term "caryatid" to the women of Caryae, taken into slavery after the Peloponnesian town's medizing alliance with the Persians in 480 BCE. Lesk (2004, 155f.) provides an overview of the polemics surrounding this terminology; see also Francis and Vickers 1983.

57 As suggested by Lawrence 1996, 122.

58 They have often been compared to sculptures attributed to Alkamenes, such as the famous group of Prokne and Itys, which would have stood nearby on the Acropolis (Hurwit 2004, 175). Unlike some of the sculptures of the frieze, the *korai* do not have mention of specific artists assigned to them.

59 See Kontoleon 1949, 69–71 and 75 as well as Rhodes 1995, 131. The discovery of a large Ionic column built into the north Acropolis wall to the east of the Erechtheion was proposed by Korres (1997a) to be an independent monument that commemorated the area of the Kekropeion. Hurwit (2004, 172) suggests that the *korai* were "thought of as participants in the cult of Kekrops."

60 As argued by Scholl 1995 and 1998.

61 Burn 1989, 71 suggests their style "may perhaps be connected with the general nostalgia apparent at this time." Such notions are explored more fully, though not with regard to the Erechtheion's *korai* specifically, in Palagia 2009.

62 Munich Antikensammlung 2413, a stamnos attributed to the Painter of Munich 2413. London: rhyton by the Sotades Painter, British Museum E 788. The calyx-krater in the Schloss Fasanerie (no. 77) has been dated to the end of the fifth century BCE, roughly a decade after the construction of the Erechtheion's *korai*.

63 Scholl 1995 and 1998.

64 This technique was rare for Ionic friezes and was replicated only in the cult statue base from the Hephaisteion and possibly the much-damaged metopes from the Temple of Athena Alea at Tegea.

65 Ridgway 1981, 93. See also Paton *et al.* 1927, 239.

66 For a recent overview of the style of Greek sculpture between 430 and 380 BCE, see Schultz 2007.

67 See Burn 1989, 72. Holtzmann 2000, as well as Lesk (2004, 125), discuss the correlation between figures discussed in the building accounts alongside those preserved from the frieze.

68 Boulter 1970.

69 Boulter's study of the stylistic qualities of the figures from the Erechtheion frieze found a variety of different "hands" by which she could determine at least seven masters.

70 To date, over 120 fragments of the frieze have been discovered, but given their fragmentary nature, that does not mean there were that many figures in total. Harold North Fowler compiled the majority of these fragments in Paton *et al.* 1927, assigning 56 of the fragments to the North Porch based on Pallat's publications. To be added to Fowler's original count are fragments discussed by Glowacki 1995, compiled from Oscar Broneer's excavations of the North Slope of the Acropolis in the 1930s, as well as Koukouli 1967, Brouskari 1988, and Trianti 1998.

71 As suggested by Shoe 1949, 348.

72 Pallat 1912, followed by his studies of the north porch (1935 and 1937).

73 Because the frieze height corresponds to the height of the columns which support the entabluature, that of the north porch of the Erechtheion is higher than the rest of the temple, and figures could be more easily assigned to this section of the frieze. See Ridgway 1981, 93.

74 Pallat 1935 and 1937, Add. 1. Lesk (2004, 71) points out the "large margin of uncertainty" for reconstruction, given the sizes of the dowel holes in the frieze blocks versus those in the backs of the figures.

75 The conflation of Erichthonios and Erechtheus is still debated by scholars; see Burkert 1983, 160, Parker 1986, 200–201, and most recently, Sourvinou-Inwood 2011, 51f. Erichthonios and Erechtheus appear together on the Codrus painter's kylix in Berlin (Antikensammlung F 2537) and thus it is conceivable that they could both be represented in the same narrative.

76 Hurwit 2004, 177. Räuchle (2015, 10) argues for the importance of groups of mothers on the Erechtheion frieze as demonstrative of a "genealogical message . . . aimed at praising the exemplary mothers and venerable offspring of the Athenians."
77 See Brouskari 1988, no. 1, as well as Koukouli 1967.
78 See Hadzisteliou Price 1978, 1–13 for an overview of the meaning of *kourtrophoi*; she attempts to connect them to the social systems of ancient Greece which tied the individual to the state in a system derived from familial ties and obligations, a fitting suggestion for a frieze that is closely associated with autochthony and collective identity. See Brommer 1963 and Palagia 1993 on the Parthenon's pediments.
79 See *LIMC* s.v. Aglauros, Herse, Pandros no. 31 for relevant bibliography.
80 Pallat 1912, 194–6. The kneeling figure of Pandrosos is unparalleled in vase painting, to my knowledge.
81 Neils 1983 identifies these spectators as personifications of Athenian political life, with the Kekropids watching the scene from above and to the left.
82 Boulter 1970 for Akr. 1237, which she compares to Figure T of the Parthenon's west pediment. Palagia 1993, 50, identifies Figure T as Kreousa.
83 See, for example, Broneer 1935, Fig. 29.
84 Athens, Archaeological Collection of III Ephorate of Prehistoric and Classical Antiquities, A 8922. See Kaltsas and Shapiro 2008, Cat. 76, for a full description of the vase, which names all figures with inscriptions, as well as an illustration of the body of the vase. The vase, including the lid, is being prepared for publication by M. Zafeiropoulou.
85 Broneer 1933, 1935, 1940. This area of the north slope had a particularly rich ancestral history, dating to some of the earliest phases of Athenian settlement and religious and ritualistic activity.
86 For example, an amphora by the Amasis Painter in New York (MMA 06.1021.69), where a warrior is putting on his greaves while a Corinthian helmet rests on the ground next to him.
87 See Glowacki (1995, 329) for examples, including those from the Temple of Athena Nike.
88 Munich Antikensammlung 2413; Berlin Antikensammlung F 2537.
89 J.Hall (1997, 53) notes how Athens and the Athenians were named not for a "culture hero," but for a goddess; as the Erechtheion was chiefly the home of Athena Polias, it is not surprising to see her play a dominant role in the Erechtheion frieze. On the close relationship between the goddess and the city of Athens in other public art forms, see Kennedy 2009.
90 Felten 1984, 114–17. See Parker (2005, 75) as well as Burkert (1983, 144 no. 35) for more references to the Skira festival.
91 Deubner 1932, 40–50; Simon 1983, 23; Sourvinou-Inwood 2011, 173–4.
92 Cleveland Museum of Art, 82.142.
93 See Neils 1983.
94 Lorenz 2007, 138–41.
95 Other seated females include Akr. 2824 (Brouskari 1988 no. 3) and Akr. 1072 (Boulter 1970 no. 13).
96 Shapiro 2009, 264.
97 Eur. *Erechtheus*, Fr. 360 NK, lines 7-9. As paraphrased by Neils 2005, 43.
98 Shapiro 2012, 160.
99 See Harrison 1972.
100 As suggested by Rhodes 1995, 42–3. For the rebuilding of Athens, including the Agora, after the Persian destruction, see Camp 2001, 59f.
101 Saxonhouse 1986, 254.
102 Stafford 2009, 420.
103 Hurwit 2004, 179.
104 Kousser 2009.
105 Shear 1970. A version of the Eponymous Heroes monument must have been present in the Agora by the 420s BCE; the comic poet Aristophanes referred to such a monument in his *Peace* (line 1183).
106 See J.Hall 1997, 53. Kron 1976 provides a study of the visual and literary evidence for each of the ten tribes; see also Kearns 1989, 80f.
107 Shear 2007, especially 96–7.
108 See Harrison 1977 as well as Palagia 2000, 68–73.
109 Boutsikas 2011, and Boutsikas and Hannah 2012.
110 Martin-McAuliffe and Papadopoulos 2012.
111 Thakur 2007.
112 Lape 2010, 17 no. 56.

113 See Kennedy 2009, 87–94.
114 For more on this phenomenon, see Leventi 2014.

Bibliography

Balanos, Nicholas. 1938. *Les Monuments de l'Acropole, Relèvement et Conservation*. Paris: C. Massin et A. Lèvy.

Blok, Josine. 2009. "Gentrifying Genealogy: On the Genesis of the Athenian Autochthony Myth." In *Antike Mythen: Medien, Transformationen und Konstruktionen*, edited by C. Walde and U. Dill, 251–75. Berlin: Walter de Gruyter.

Boedeker, Deborah. 1998. "Presenting the Past in Fifth-Century Athens." In *Democracy, Empire, and the Arts in Fifth Century Athens*, edited by D. Boedeker and K. Raaflaub, 185–202. Cambridge, MA: Harvard University Press.

Boersma, Johannes. 1970. *Athenian Building Policy from 561/0 to 405/4 B.C*. Groningen: Wolters-Noordhoff.

Boulter, Patricia.N. 1970. "The Frieze of the Erechtheion." *Antike Plastik* 10: 7–28.

Boutsikas, Efrosyni. 2011. "Astronomical Evidence for the Timing of the Panathenaia." *American Journal of Archaeology* 115(2): 303–9.

——— and R. Hannah. 2012. "*Aitia*, Astronomy and the Timing of the Arrephoria." *Annual of the British School at Athens* 1–13.

Brommer, Frank. 1963. *Die Skulpturen der Parthenon-Giebel*. 2 vols. Mainz: Verlag Philipp von Zabern.

Broneer, Oscar. 1933. "Excavations on the North Slope of the Acropolis in Athens, 1931–1932." *Hesperia* 2(3): 329–417.

———. 1935. "Excavations on the North Slope of the Acropolis in Athens, 1933–1934." *Hesperia* 4(2): 109–88.

———. 1940. "Excavations on the Slopes of the Acropolis, 1939." *American Journal of Archaeology* 44(2): 252–6.

Brouskari, Maria. S. 1988. "Ζώδια Λαΐνεα. Nouvelles Figures de la Frise de l'Erechtheion." In *Kanon: Festschrift Ernst Berger zum 60. Geburtstag am 26. Februar 1988 gewidmet*, edited by M. Schmidt, 60–68. Basel: Vereinigung der Freunde antiker Kunst.

Bundgaard, Jens. A. 1974. *The Excavation of the Athenian Acropolis 1882–1890*. Copenhagen: Gyldendal.

———. 1976. *Parthenon and the Mycenaean City on the Heights*. Copenhagen: National Museum of Denmark.

Burkert, Walter. 1983. *Homo Necans: The Anthropology of Ancient Greek Sacrificial Ritual and Myth*, translated by P. Bing. Berkeley: University of California Press.

———. 1988. "The Meaning and Function of the Temple in Classical Greece." In *Temple in Society*, edited by Michael V. Fox, 27–47. Winona Lake, IN: Eisenbrauns.

Burn, Lucilla. 1989. "The Art of the State in Fifth-Century Athens." In *Images of Authority: Papers Presented to Joyce Reynolds on the Occasion of her Seventieth Birthday*, edited by M.M. Mackenzie and C. Roueché, 67–81. Supplementary Volume 16. Cambridge: Cambridge Philological Society.

Camp, John. M. 2001. *The Archaeology of Athens*. New Haven, CT: Yale University Press.

Clairmont, Christoph. W. 1971. "Euripides' *Erechtheus* and the Erechtheion." *Greek, Roman, and Byzantine Studies* 12(4): 485–95.

Coulton, J.J. 1977. *Greek Architects at Work: Problems of Structure and Design*. London: Elek Books Ltd.

Deubner, Ludwig. 1932. *Attische Feste*. Berlin: Verlag Heinrich Keller.

Dinsmoor, William. B. 1950. *The Architecture of Ancient Greece*, 3rd edn. rev. London: B.T. Batsford Ltd.

Dinsmoor, William. B., Jr. 1984. *Ancient Athenian Building Methods*. Princeton, NJ: The American School of Classical Studies at Athens.

Dix, T. Keith. and Carl, A. Anderson. 1997. "The Eteocarpathian Decree (*IG* I^3, 1454) and the Construction Date of the Erechtheion." *American Journal of Archaeology* 101: 373 (abstract).

———. 2004. "Small States in the Athenian Empire: The Case of the Eteokarpathioi." Syllecta Classica 15: 1–31.

Epstein, Shimon. 2008. "Why Did Attic Building Projects Employ Free Laborers Rather than Slaves?" *Zeitschrift für Papyrologie und Epigraphik* 166: 108–12.

———. 2013. "Attic Building Accounts from Euthynae to Stelae." In *Archives and Archival Documents in Ancient Societies: Legal Documents in Ancient Societies IV, Trieste 30 September–1 October 2011*, edited by Michele Faraguna, 127–41. Trieste: EUT Edizioni Università di Trieste.

Felten, Florens. 1984. *Griechische tektonische Friese archaischer und klassischer Zeit*. Waldsassen-Bayern: Stiftland-Verlag.
Ferrari, Gloria. 2002. "The Ancient Temple on the Acropolis at Athens." *American Journal of Archaeology* 106(1): 11–35.
Francis, E. David. and Michael. Vickers. 1983. "Signa Priscae Artis: Eretria and Siphnos." *Journal of Hellenic Studies* 103: 49–67.
Gantz, Timothy. 1993. *Early Greek Myth: A Guide to Literary and Artistic Sources*. 2 vols. Baltimore, MD: Johns Hopkins University Press.
Glowacki, Kevin. 1995. "A New Fragment of the Erechtheion Frieze." *Hesperia* 64(3): 325–31.
Goette, H. 2001. *Athens, Attica, and the Megarid: An Archaeological Guide*. London: Routledge.
Hadzisteliou Price, T. 1978. *Kourotrophos: Cults and Representations of the Greek Nursing Deities*. Leiden: Brill.
Hall, Jonathan. M. 1997. *Ethnic Identity in Greek Antiquity*. Cambridge: Cambridge University Press.
———. 2002. *Hellenicity: Between Ethnicity and Culture*. Chicago, IL: University of Chicago Press.
Harris, Diane. 1995. *The Treasures of the Parthenon and Erechtheion*. Oxford: Oxford University Press.
Harrison, Evelyn. B. 1972. "The South Frieze of the Nike Temple and the Marathon Painting in the Painted Stoa." *American Journal of Archaeology* 76(4): 353–78.
———. 1977. "Alkamenes' Sculptures for the Hephaisteion: Part II, the Base." *American Journal of Archaeology* 81(3): 265–87.
Holland, Leicester. B. 1924. "The Erechtheum Papers: I–IV." *American Journal of Archaeology* 28: 1–23, 142–69, and 402–34.
Holtzmann, B. 2000. "Note sure la Frise de l'Erechtheion le Sujet de MAcr 1073." *Bulletin de correspondance hellénique* 124(1): 221–6.
Hurwit, Jeffrey. 1999. *The Athenian Acropolis: History, Mythology, and Archaeology from the Neolithic Era to the Present*. Cambridge: Cambridge University Press.
———. 2004. *The Acropolis in the Age of Pericles*. Cambridge: Cambridge University Press.
Iakovides, Spyros. E. 1962. *Ἡ Μυκηναϊκὴ Ἀκρόπολις τῶν Ἀθηνῶν*. Athens.
Jenkins, Ian. 2006. *Greek Architecture and Its Sculpture*. Cambridge, MA: Harvard University Press.
Jeppesen, Kristian. 1987. *The Theory of the Alternative Erechtheion: Premises, Definition, and Implications*. *Acta Jutlandica* LXIII:1/Humanities Series 60. Aarhus: Aarhus University Press.
Kaltsas, Nicolaus. and A. Shapiro, eds. 2008. *Worshipping Women: Ritual and Reality in Classical Athens*. New York: The Alexander S. Onassis Public Benefit Foundation.
Kearns, Emily. 1989. *The Heroes of Attica. Bulletin of the Institute of Classical Studies*, Suppl. 57. London: Institute of Classical Studies.
Kennedy, Rebecca. F. 2006. "Justice, Geography and Empire in Aeschylus' *Eumenides*." *Classical Antiquity* 25(1): 35–72.
———. 2009. *Athena's Justice: Athena, Athens, and the Concept of Justice in Greek Tragedy. Lang Classical Studies* 16. New York: Peter Lang Publishing.
———. 2013. "Geography in Greek Tragedy." In *The Encyclopedia of Greek Tragedy* Vol. 2, edited by Hanna M. Roisman, 1–5. Oxford: Wiley-Blackwell.
———. 2014. *Immigrant Women in Athens: Gender, Ethnicity, and Citizenship in the Classical City*. London: Routledge.
Kontoleon, Nicolaus. M. 1949. *Το Ερέχθειον ὡς οἰκοδόμημα χθονίας λατρείας*. Athens.
Korres, Manolis. 1997a. "An Early Attic Ionic Capital and the Kekropion on the Athenian Acropolis." In *Greek Offerings: Essays on Greek Art in honour of John Boardman*, edited by Olga Palagia, 95–107. Oxbow Monograph 89. Oxford: Oxbow Books.
———. 1997b. "Die Athena-Tempel auf der Akropolis." In *Kult und Kultbauten auf der Akropolis. Internationales Symposion vom 7. bis 9. Juli 1995 in Berlin*, edited by W. Hoepfner, 218–43. Berlin: Archaologisches Seminar der Freien Universität Berlin.
Koukouli, Haido. 1967. "Νέο σύμπλεγμα από τη ζωφόρο του Ερεχθείου." *Archaiologikon Deltion* 22 A': 133–48.
Kousser, Rachel. 2009. "Destruction and Memory on the Athenian Acropolis." *Art Bulletin* 91(3): 263–82.
Kron, Uta. 1976. *Die Zehn Attischen Phylenheroen: Geschicthe Mythos, Kult und Darstellungen*. Berlin: Gebrüder Mann Verlag.
Lape, Susan. 2010. *Race and Citizen Identity in the Classical Athenian Democracy*. Cambridge: Cambridge University Press.
Lawrence, Arnold. W. 1996. *Greek Architecture*. 5th ed., revised by R.A. Tomlinson. New Haven, CT: Yale University Press.

Lesk, Alexandra. L. 2004. "A Diachronic Examination of the Erechtheion and its Reception." PhD diss., University of Cincinnati.

Leventi, Iphigeneia. 2014. *Πόλη σε κρίση· αρχιτεκτονική γλυπτική της Αθήνας στην περίοδο του Πελοποννησιακού πολέμου*. Athens: A. Καρδαμίτσα.

Loraux, Nicole. 1993. *The Children of Athena: Athenian Ideas about Citizenship and the Division between the Sexes*. Translated by C. Levine. Princeton, NJ: Princeton University Press.

———. 2000. *Born of the Earth: Myth and Politics in Athens*. Translated by S. Stewart. Ithaca, NY: Cornell University Press.

Lorenz, Katherina. 2007. "The Anatomy of Metalepsis: Visuality Turns Around on Late Fifth-Century Pots." In *Debating the Athenian Cultural Revolution: Art, Literature, Philosophy, and Politics 430–380 BC*, edited by R. Osborne, 116–43. Cambridge: Cambridge University Press.

Martin-McAuliffe, Samantha. L. and John. K. Papadopoulos. 2012. "Framing Victory: Salamis, the Athenian Acropolis, and the Agora." *Journal of the Society of Architectural Historians* 71(3): 332–61.

Meyer, Marion. 2014. "Alte Kulte Unter einem Neuen Dach: Die Visualisierung von Kultgemeinschaft im Erechtheion von Athen." In *Visualisierungen von Kult*, edited by M. Meyer and D. Klimburg-Salter, 212–39. Vienna: Böhlau Verlag.

Miles, Margaret. M. 2012. "Entering Demeter's Gateway: The Roman Propylon in the City Eleusinian." In *Architecture of the Sacred: Space, Ritual, and Experience from Classical Greece to Byzantium*, 114–51. Cambridge: Cambridge University Press.

Neils, Jenifer. 1983. "A Greek Nativity by the Meidias Painter." *Bulletin of the Cleveland Museum of Art* 70(7): 274–89.

———. 2005. "The Girl in the *Pithos*: Hesiod's *Elpis*." In *Periklean Athens and Its Legacy: Problems and Perspectives* edited by J.M. Barringer and J.M. Hurwit, 37–45. Austin: University of Texas Press.

Ogden, Daniel. 1996. *Greek Bastardy in the Classical and Hellenistic Periods*. Oxford: Clarendon Press.

Pakkanen, Jari. 2006. "The Erechtheion Construction Work Inventory (*IG* I^3 474) and the Dörpfeld Temple." *American Journal of Archaeology* 110(2): 275–81.

Palagia, Olga. 1993. *The Pediments of the Parthenon*. Leiden: Brill.

———. 2000. "Meaning and Narrative Techniques in Statue-Bases of the Pheidian Circle." In *Word and Image in Ancient Greece*, edited by N.K. Rutter and B.A. Sparkes, 53–78. Edinburgh Leventis Studies I. Edinburgh: University Press.

———. 2009. "Archaism and the Quest for Immortality in Attic Sculpture during the Peloponnesian War." In *Art in Athens During the Peloponnesian War*, edited by O. Palagia, 24–51. Cambridge: Cambridge University Press.

Pallat, Ludwig. 1912. "The Frieze of the Erechtheum." *American Journal of Archaeology* 16(2): 175–202.

———. 1935. "Der Fries der Nordhalle des Erechtheion." *Jahrbuch des Deutschen Archäologischen Instituts* 50: 79–137.

———. 1937. "Zum Friese der Nordhalle des Erechtheion" *Jahrbuch des Deutschen Archäologischen Instituts* 52: 17–29.

Papanikolaou, Alexander. 1994. "The Restoration of the Erechtheion." In *Acropolis Restoration: The CCAM Interventions*, edited by R. Economakis, 137–49. London: Academy Editions.

Parker, Robert. 1986. "Myths of Early Athens." In *Interpretations of Greek Mythology,* edited by J. Bremmer, 187–214. London and Sydney: Croom Helm.

———. 2005. *Polytheism and Society at Athens*. Oxford: University Press.

Paton, James. M. 1927. *The Erechtheum*. Cambridge, MA: Harvard University Press.

Pelling, Christopher. 2009. "Bringing Autochthony Up-to-Date: Herodotus and Thucydides." *The Classical World* 102(4): 471–83.

Platt, Verity. 2011. *Facing the Gods: Epiphany and Representation in Graeco-Roman Art, Literature and Religion*. Cambridge: Cambridge University Press.

Psarra, Sophia. 2004. "The Parthenon and the Erechtheion: The Architectural Formation of Place, Politics and Myth." *The Journal of Architecture* 9: 77–104.

Räuchle, Viktoria. J. 2015. "The Myth of Mothers as Others: Motherhood and Autochthony on the Athenian Akropolis." *Mondes Anciens* 6: 2–24.

Rhodes, Robin. F. 1995. *Architecture and Meaning on the Athenian Acropolis*. Cambridge: Cambridge University Press.

Ridgway, Brunilde. S. 1981. *Fifth Century Styles in Greek Sculpture*. Princeton, NJ: Princeton University Press.

Rosivach, Vincent. J. 1987. "Autochthony and the Athenians." *Classical Quarterly* New Series 37(2): 294–306.

Saxonhouse, Arlene. W. 1986. "Myths and the Origins of Cities: Reflections on the Autochthony Theme in Euripides' *Ion*." In *Greek Tragedy and Political Theory*, edited by J. Peter Euben, 252–73. Berkeley: University of California Press.

Schmidt, Evamaria. 1982. *Geschichte der Karyatide: Funktion und Bedeutung der Menschlichen Träger- und Stützfigur in der Baukunst*. Würzburg: Konrad Triltsch Verlag.

Scholl, Andreas. 1995. "Choephoroi: Zur Deutung der Korenhalle des Erechtheion." *Jahrbuch des Deutschen Archäologischen Instituts* 110: 179–212.

———. 1998. *Die Korenhalle des Erechtheion auf der Akropolis: Frauen für den Staat*. Frankfurt am Main: Fischer Taschenbuch Verlag.

Schultz, Peter. 2007. "Style and Agency in an Age of Transition." In *Debating the Athenian Cultural Revolution: Art, Literature, Philosophy, and Politics 430–380 BC*, edited by R. Osborne, 144–87. Cambridge: Cambridge University Press.

Schumacher, Leonard. 2001. *Sklaverei in der Antike: Alltag und Schicksal der Unfreien*. Munich: Verlag C.H. Beck.

Shapiro, H. Allen. 1998. "Autochthony and the Visual Arts in Fifth-Century Athens." In *Democracy, Empire, and the Arts in Fifth-Century Athens*, edited by D. Boedeker and K.A. Raaflaub, 127–51. Cambridge, MA: Harvard University Press.

———. 2009. "Topographies of Cult and Athenian Civic Identity on Two Masterpieces of Attic Red-Figure." In *Athenian Potters and Painters: Volume II*, edited by J.H. Oakley and O. Palagia, 261–9. Oxford: Oxbow Books.

———. 2012. "Attic Heroes and the Construction of the Athenian Past in the Fifth Century." In *Greek Notions of the Past in the Archaic and Classical Eras: History without Historians*, edited by J. Marincola, L. Llewellyn-Jones, and C. Maciver, 160–82. *Edinburgh Leventis Studies* 6. Edinburgh: Edinburgh University Press.

Shear, I. Mylonas. 1999. "Maidens in Greek Architecture: The Origin of the 'Caryatids'." *Bulletin de correspondance hellénique* 123(1): 65–85.

Shear, Julia. 2007. "Cultural Change, Space, and the Politics of Commemoration in Athens." In *Debating the Athenian Cultural Revolution: Art, Literature, Philosophy, and Politics 430–380 BC*, edited by R. Osborne, 91–115. Cambridge: Cambridge University Press.

Shear, T.L. 1970. "The Monument of the Eponymous Heroes in the Athenian Agora." *Hesperia* 39(3): 145–222.

Shoe, Lucy. T. 1949. "Dark Stone in Greek Architecture." *Hesperia Supplement 8: Commemorative Studies in Honor of Theodore Leslie Shear*, 341–52.

Simon, Erika. 1983. *Festivals of Attica*. Madison: University of Wisconsin Press.

Sourvinou-Inwood, Christiane. 2011. *Athenian Myths and Festivals: Aglauros, Erechtheus, Plynteria, Panathenaia, Dionysia*. Edited by R. Parker. Oxford: Oxford University Press.

Stafford, Emma. 2009. "Visualizing Creation in Ancient Greece." *Religion and the Arts* 13: 419–47.

Thakur, Sanjaya. 2007. "Identity under Construction in Roman Athens." In *Negotiating the Past in the Past: Identity, Memory, and Landscape in Archaeological Research*, edited by N. Yoffee, 104–27. Tucson: University of Arizona Press.

Travlos, John. 1971. *Pictorial Dictionary of Ancient Athens*. New York: Praeger Publishers.

Trianti, Ismene. 1998. *Το Μουσείο Ακροπόλεως*. Athens: Eurobank.

Valdés Guía, M. 2008. *El Nacimiento de la Autoctonía Ateniense: Cultos, Mitos Cívicos y Sociedad de la Atenas del s. VI a. C.* Madrid: Publicaciones Universidad Complutense de Madrid.

Zacharia, Katerina. 2003. *Converging Truths: Euripides'* Ion *and the Athenian Quest for Self-Definition*. Leiden: Brill.

19

MODELING ETHNICITY

Patterns of ethnic evaluation in the Indian records of Alexander's companions and Megasthenes

Daniela Dueck

Awe, disgust, and amusement—a variety of feelings and impressions—emerge from what survived as written records of the journeys of the companions of Alexander of Macedon. Clearly, any tourist or traveler shares these same reactions when confronting new places and unknown environments. It is, therefore, hardly surprising to find a mixture of attraction and repulsion emerging from watching, hearing, smelling, tasting, and touching unfamiliar objects and creatures in the texts from the second half of the fourth century BCE that recount Alexander's journey into the unknown. This chapter deals exactly with these impressions, but specifically with those involving peoples. The goal presently is to reveal a possible underlying pattern for handling unusual and strange phenomena and for organizing these newly acquired impressions. Needless to say, the model suggested here derives from a modern analysis based on the ancient sources. The ancient authors probably did not phrase, even to themselves, a coherent model as such; at the same time, their ways of representing ethnographic phenomena reveal patterns of sorting and explaining which will be examined in what follows.

The body of evidence for this study is the written records of Alexander's companions and Megasthenes' *Indika*. The pretext for a visit to India by the former group and that of Megasthenes is slightly different. Alexander's men accompanied the King on his wider military campaigns, some as friends, some as officers, some as scholars. They went to India as companions who were meant to document and measure what they saw. Megasthenes in his turn was sent as an ambassador of Seleucus I around 304 BCE to the court of one of the Indian kings. Despite this slight difference, all works are taken here together as representing the same general period and geopolitical situation, when Hellenistic visitors experienced for the first time a direct, relatively extended and close contact with eastern regions, known up until that time merely from sporadic pieces of information and rumors.

Alexander's campaigns led his knowledge-seeking escorts to countries that were already stamped earlier in Greek geographic tradition as strange and wonderful (e.g. Egypt, and see below), but also to regions practically unknown to the Greeks up to that time (e.g. India). The knowledge Greek audiences might have had about India before Alexander was quite vague. The reference in the *Odyssey* (1.23–4) to two sets of Ethiopians, eastern and western, perhaps hinted at a certain idea of India, but even records based on actual visits of individuals or on

Persian sources, such as Scylax of Karyanda (c. 515 BCE) and Ctesias of Cnidus (c. 400 BCE), incorporated a mixture of facts, exaggerations, and myths.[1] This is why the expedition of Alexander with its many witnesses and written testimonies is a significant milestone in classical geography and, with it, in ethnography, even if, as we shall see, its records kept some traditional Greek viewpoints despite eyewitness experience.

There are names of more than twenty people who were part of Alexander's entourage and who left some sort of a written record of their journeys. Among these, several are better known, such as Nearchus of Crete, Onesicritus of Astypalaea, and Aristobulus of Cassandreia, partly because a larger share of their records survived and partly because of their role in the King's expedition.[2] To this number, we add in the present study the fragmentary *Indika* of Megasthenes.[3]

The similar and the opposite

In his first-century CE *Geographika*, aiming at offering a survey of the entire inhabited world at the time, Strabo devoted the first section of book 15 to India. This book is in fact a compilation of earlier sources including extensive excerpts from the records of Alexander's companions and Megasthenes, with brief comments and linking sentences by Strabo. Very near the beginning of his Indian survey, Strabo says that Aristobulus compared the traits of India with those of Egypt and Ethiopia through two measures, the similar (*hē homoiotēs*), and the opposite (*hē enantiotē*) (Strabo 15.1.19).

This comment, which is probably Strabo's own observation, is clearly not a defined theoretical system or scientific way of approaching ethnography. Nevertheless, it reveals, briefly and simply, two modes of explanation that were current in Greek thought already in the philosophical discussions of the Pre-Socratics. These two methods were polarity ('the opposite') and analogy ('the similar'). In early Greek literary texts, the Homeric epics for instance, and more definitely in early philosophical works, polarity and analogy were an essential part of a systematic attempt to give rational accounts of natural phenomena and of the universe as a whole. The polarity prevailed in Greek cosmological, physical, and medical theories that were based on different kinds, usually pairs, of opposites. Plato and Aristotle also applied this dichotomous classification or dualist organization of reality. Analogy was another mode or method of explanation that was, and still is, a general mode of reasoning (and one seemingly common in some form or other to most peoples at various periods of time). Similes, metaphors, and imagery were the literary forms of analogy, but it also featured in more scientific discourses, including geographies and ethnographies.[4]

When Strabo discerns in Aristobulus specifically these two modes of the opposite (polarity) and the similar (analogy), he, in a way, hands us a key to evaluate patterns of thought and analysis within these records. Even if, as noted, these methods were old and prevalent in earlier and contemporary philosophy, still we have here a specific matching of theoretical terms with a defined text. Once the criteria of similar and opposite are introduced, there must be a standard according to which any observed object is evaluated as similar to or opposite from. As we shall see, the relevant texts discussed below reveal several circles of standards that move from the general to the particular, from the broadest to the narrowest. But an initial and more basic division within the circle of standards is the one of *phusis* vs. *nomos*. Traditionally, since the earliest records discussing unfamiliar peoples, Greek authors have referred to both their physical appearance and their local customs. This dual evaluation of foreign peoples, which is still essential in anthropological research, corresponds with fifth-century BCE philosophical definitions of the contrasting duality of *phusis* and *nomos*. These terms were commonly used

as opposed and mutually exclusive, and became key concepts.[5] Specifically related to ethnography, it was conveyed that different peoples had different habits (*nomoi*), but there could still be *nomoi* that were applicable to all mankind.[6] Although in theoretical discussions there were those who supported *phusis* over *nomos* and vice versa,[7] it seems that in the ethnographies of the fourth century BCE, the two spheres were realized, but not hierarchically.[8] We may therefore see in the present study that similarity and opposition are applied in our sources on both physical and practical aspects of human existence. Within these two modes of comparison, there are several standards of evaluation.

Mankind as standard

Encounters between human groups begin with immediate visual impressions pertaining to physical and physiological appearance according to the broadest common denominator: human physiology. Broadly speaking, human anatomy and physiology is common to all human beings regardless of their cultural context. Therefore, the most immediate and basic mental act is to measure new peoples against this universal standard. Vastly different appearance is grasped as inhuman and belongs with the realm of myth or paradox (see below), but when basic human features are unusual not in essence but in size or shape, they seem to be considered within a lower or primary register of strangeness (*BNJ* 134 F 11 = Pliny, *HN* 7.28): "Onesicritus says that in those places in India where there are no shadows, men's bodies grow to five cubits and two palms (2.5 m), that they live for 130 years, and that they do not grow old but die in middle age."[9]

According to this testimony, the physiology of these Indians is measured against what is considered normal and is presented as different in terms of height, age, and life expectancy. The basic anatomy and physiology are the same as the ones of the visitors. Moreover, the methods for measuring both height and duration are the same as the ones applied for all mankind—cubits, palms, years. Thus, there is a standard—both of height and duration—against which the extreme values make the difference. All three traits related in this fragment—height, age, and life expectancy—are presented as facts (even if doubt may be cast upon their truth) in the sense that even if Onesicritus got them wrong, still one cannot detect any critical comment regarding their credibility, at least not in the way Pliny cites this source. Exaggerated human physiological traits, such as extreme old age, prevailed in Greek utopic depictions of foreign lands and peoples.[10] Nevertheless, even if it is possible that the records of Alexander's companions also included such a tendentious description, still it does not discard the fact the measuring rod is what is thought to be the normal human state.

Megasthenes, too, is said to have reported that "there are men five *spithamai* tall (c. 1 m) and others three *spithamai*, some without nostrils, but with only two breathing holes above their mouths" (*BNJ* 715 F 27 b = Strabo 15.1.57), but Strabo defines this report, together with other oddities, as pure myth. Still referring to Indian physiology, Nearchus commented that the Indians "have bodies which are lean and lanky, and very nimble in comparison to other men" (*BNJ* 133 F 11 = Arr. *Indika*, 17.1). Here, there is an explicit indication of the overall human standard as the Indians are compared to other men, *huper tous allous anthrōpous*.

Nearchus also referred to the level of health in India: "Among the Indians, there are not many afflictions since the seasons here are evenly balanced" (*BNJ* 133 F 10 a = Arr. *Indika*, 15.12), while "on account of their [the Indians'] plain life and the absence of wine there are not many diseases" (*BNJ* 133 F 10 b = Strabo 15.1.45). The good condition of health is naturally relative to what the author knew, but it remains in the category of comparison with normal or usual human physiology. The explanation for the healthy situation varies between local

climate conditions, which clearly belong with the deterministic *phusis* of the region, and plain life and absence of wine, which seem to refer to local habits, thus *nomos*.

Like the extreme longevity mentioned above, impeccable health was sometimes associated in Greek ethnography with other nations in remote regions of the inhabited world.[11] Because such traits were considered good and desirous, they were part of the traditional idealization of remote peoples and suited the tendency to ascribe optimal traits to remote places and peoples.[12] Here we see how tradition combines with actual acquaintance and how an image of foreigners is grasped and created by authors to be delivered to their Greek audiences. These authors interpreted what they saw in the light of existing knowledge.

The most common feature of all mankind is human physiology, but there are comments by the Hellenistic authors that imply that in their customs, too, the inhabitants of India were different from the rest of mankind: "The Indians are lovers of song and dance above all other people" (*philōidoi gar, eiper tines alloi, Indoi kai philorchēmones*) (Nearchus 133 F 32 = Arr. *Indika* 6.3.5). This is certainly an unproven and non-scientific comment—obviously no thorough research of all of mankind could have been made. Therefore, it must be understood as a rhetorical comment meant to emphasize the extent of abnormality.

Hellenism as standard

Once the physical and physiological appearance of foreigners is assessed, habits and behavior are inspected. This cultural criterion, the *nomos*, is central to any ethnographic assessment, and usually the primary standard for evaluation is naturally the closest to the world of the viewer, i.e. one's own culture. Megasthenes and the historians of Alexander were no exception and, like their Greek predecessors, evaluated the unfamiliar societies they met according to customs and norms of their own Hellenic culture. This mental process worked in the same two-way dynamic of the similar and the opposite: the visitors found familiar details within foreign *nomoi*, which reminded them of their own, or emphasized the essential difference of unfamiliar customs as compared with Greek ones. The literary and cultural application of *interpretatio Graeca* and its demonstration in Hellenistic works on India has already been noticed and discussed,[13] and there is no point in offering here a comprehensive study of all occurrences of this phenomenon. But since the point in the present discussion is to place this ethnographic interpretation within a wider model, several examples seem appropriate.[14]

As noted above, elements in local customs that overlapped familiar ones were immediately interpreted as essentially Hellenic. India's extravagant processions accompanied by the beating of drums and flowered robes were translated into 'Bacchic' processions and tied up with the myth of Dionysus' journeys to the East, and local custom to wear animal skins, to carry clubs and to brand domestic animals with the mark of a club, was interpreted as evidence to the ethnic origin of the inhabitants as descendants of Heracles (Strabo 15.1.8). Megasthenes even implied that the Indian journey of Dionysus was a civilizing event because in pre-Dionysian India the inhabitants did not dwell in cities, did not reverenced any temples of the gods, wore animals' skins and ate tree barks (*BNJ* 715 F 12 = Arr. *Indika* 7.3).[15] He too reported that the Indians came out against Alexander to battle with the sound of cymbals and drums interpreted as Dionysian elements (*BNJ* 715 F 12 = Arr. *Indika* 7.9).

Another motif in the Indian ethnography of late fourth-century Greek authors was the emphasis on what seemed to these viewers as cultural simplicity. Indian simplicity was detected in both the material-technical and the socio-political domain. Clearly, primitivism and progress were defined against cultural norms in Hellenic society. Accordingly, the

sources indicated that the Indians were simple because they did not mine and cast metals, they handled business in an unsophisticated manner (Onesicritus *BNJ* 134 F 21 = Strabo 13.1.30), and they did not use gold or silver, even though they had mines (Onesicritus *BNJ* 134 F 24 = Strabo 13.1.34). Their socio-political simplicity was expressed through the notions that some of them had no letters (Megasthenes *BNJ* 715 F 32 = Strabo 15.1.53), that their laws were not written (Nearchus *BNJ* 133 F 23 = Strabo 15.1.66) and that (Onesicritus *BNJ* 134 F 24 = Strabo 15.1.34):

> . . . they do not study the sciences in detail, with the exception of medicine, since it is wickedness to have excessive training in some of them . . . they do not have lawsuits except for murder and assault, for it is not within the individual's power to avoid suffering these whereas in contracts it is up to each person, so that one must endure it if someone breaks faith, but also attend to whom is to be trusted and not to fill the city with lawsuits.

Again, these details seem to be indicated by the Hellenistic authors specifically because they are unlike what they knew from their own original societies: written laws, lawsuits, scholarship, pursuit of knowledge. The implicit phraseology seems to hint that the western visitors saw Indian technical simplicity indeed as primitivism, implying shortcomings and underdevelopment, but their simple socio-political ways were depicted with an undertone of admiration and even envy: the foreigners were naïve and moral.[16]

In the sphere of daily habits and specifically related to the inhabitants in the land of Mousikanos,[17] Onesicritus commented: "Particular to them is that there are Spartan-style common messes (*sussitia tina Lakōnika*) where they eat in public, with the products of hunting as the prime dishes," (Onesicritus *BNJ* 134 F 24 = Strabo 15.1.34). The interpretation of these meals as "Spartan" is revealing. Still related to eating habits, Megasthenes supplies the following details without hiding his opinion and interpretation (*BNJ* 715 F 32 = Strabo 15.1.53): ". . . no one else would accept (*ouk an tis apodexaito*) always passing one's life alone without a common time for dinner and breakfast rather than what pleases each: the other way is better (*kreītton*) for a social and political life." Clearly, Megasthenes found this habit of solitary eating in unfixed hours unacceptable because he lived in a society orientated towards "social and political life."

Alexander's companions and Megasthenes reported that there were no slaves in India (Onesicritus *BNJ* 134 F 25 = Strabo 15.1.54; Megasthenes *BNJ* 715 F 4 = Diod. Sic. 2.39.5; F 16 = Arr. *Indika* 10.8). This situation is compared to Sparta and its Helots either by emphasizing the similarity between the Indian and the Spartan societies (Onesicritus F 24), or by emphasizing the difference between the two societies on this point (Megasthenes F 16). It is also noteworthy that the lack of slaves is interpreted as an indication of good governance (Onesicritus F 25) and as a most marvelous (*thaumasiōtaton*) and unusual custom (*nomima enia*) (Megasthenes F 4).

Marriage customs were also different from what was known to the visitors, and the specific points that are emphasized as different and strange reveal once again their Greek point of view. From the details they chose to mention, one may infer what was usual in Greek society as these customs were grasped as opposite. Indian marriage was thus reported as arranged without dowries, "no giving or receiving anything" (Nearchus *BNJ* 133 F 11 = Arr. *Indika* 17.4; F 23 = Strabo 15.1.66):

> He [Aristobulus] mentions the novel and strange (*kaina kai aēthē*) customs at Taxila. Those who, through poverty, are unable to find husbands for their daughters parade

> them in the market-place in the prime of their youth to the accompaniment of the trumpet and drums by which they signal also the call to battle, thereby summoning a crowd. When someone approaches, they expose their backs at first as far as their shoulders, and then their fronts. If she satisfies him and allows herself to be persuaded, then he marries her . . . And to have numerous wives is a custom practiced also by others. (Aristobulus *BNJ* 139 F 42 = Strabo 15.1.62)

The point of view is clearly Greek. Such cultural insularity, in which the viewing culture measures any foreign cultural phenomenon according to its own standards, is probably natural to any encounter of insiders and outsiders,[18] and thus was not peculiar to Alexander's men and Megasthenes. Nevertheless, as we shall see, this traditional pattern is only a part of a more complex model.

Egypt and Ethiopia as standard

When the extent of the strangeness of a people is increased, the standard seems to change. As noted earlier, Strabo defined Aristobulus' approach to physical conditions in India as based on "explaining the similarity of this country with Egypt and Ethiopia and in turn its opposition" (15.1.19). In surveying India, the historians of Alexander were consistently using Egypt mostly, but also Ethiopia, as their guideline for comparison of both the natural and geographical surroundings, and the ethnographic traits of the region.[19] Egypt was already established in Greek ethnographic tradition as an unusual place, both ethnographically and geographically.[20] In Hekataios' times, and certainly in Herodotus', Egypt was marked as a region containing an unusual concentration of strange social and natural phenomena. Specifically referring to ethnography, Herodotus phrases this recognition in his famous paragraph where he asserts that the Egyptians represented the exact opposite to all that was known to the Greeks (Hdt. 2.35.2–36):

> Egyptians, with their different (*heteroios*) climate, and with the river having a nature different (*phusis alloiē*) from other rivers, established manners and customs opposite (*empalin*) from other men in almost all matters: among them the women go to the market and engage in trade, and the men stay at home and weave; others weave pushing the woof upwards, Egyptians, downwards; the men carry their loads on their heads and the women, on their shoulders; the women urinate standing up and the men, crouching down; they relieve themselves in their houses and they eat outside in the streets . . . they knead dough with their feet and clay with their hands, with which also they gather up dung . . . as to cloths, the men wear two each and the women but one . . . they write letters and calculate with pebbles from the right to the left, while the Hellenes do so from the left to the right . . . .[21]

This key excerpt establishes in Greek ethnography a solid image of the Egyptians as opposite from the normative, which was in fact defined through Greek norms.[22] It thus became a point of reference and stereotype for a 'barbarian' nation, and this stereotypic image in turn became an inherent part of what Skinner defines as the "reception of difference."[23] Besides adherence to the Herodotean "rhetoric of otherness," which is apparent, for instance, in Nearchus' clear verbal and stylistic parallels with Herodotus' text,[24] there are specific points which demonstrate how the Hellenistic ethnographies of the Indians are occasionally measured against what the Greek audience was expected to know of Egypt or Ethiopia. In this way, the already known,

even if stereotypical, became the current standard for the application of analogy and polarity in the face of newly explored regions.

While the topography, zoology, and botany of India is constantly compared in our sources to the ones in Egypt and Ethiopia, when referring to humans, the clearest application of the Egypto-Ethiopian standard refers to the color of the skin of India's inhabitants. Apparently, according to the physiological norms in European Greek society, skin tone was relatively pale by comparison and this caused Greek tourists or travelers to comment on the dark color of the Indian skin.[25] But these observations were made through an analogy with the complexion of the Ethiopians and Egyptians (Strabo 15.1.13): "Among the people [of India] those in the south are similar (*homoioi*) to the Ethiopians in color, but in their appearance and hair they are similar to others . . . but those in the north [are similar] to the Egyptians."[26] Additionally, in a brief digression summarizing the accounts of "Alexander and those who served in his army," Arrian commented that the Indians "were blacker than the rest of men, except the Ethiopians (*melanterous tōn allōn anthrōpōn, plēn Aithiopōn*)" (*Anab.* 5.4.4).

The difference in skin color is not a fundamental difference, but a difference in extent or level of darkness. This is why the third category of standards in the proposed model is applied: the skin tone of the Indians is compared with that of the rest of mankind, but then it is more carefully measured by a comparison (note the use of the comparative) to the complexion of the Ethiopians. This distinction was already noticed in earlier ethnographic records of India,[27] but the records of Alexander's companions include also an attempt at a rational and more scientific explanation for this situation. While earlier texts ascribed it to the extreme heat of the sun in the relevant regions,[28] Onesicritus offers another possible cause for this physiological phenomenon (*BNJ* 134 F22 = Strabo 15.1.24):

> He [Onesicritus] makes the waters alone the cause of the Ethiopians' blackness and curly hair . . . Onesicritus may have some justification, for he says that the sun is no closer to the Ethiopians than to others, but that it is directly above and for this reason scorches more: thus it is not right to say that the sun nears their borders when it is equally distant from everyone. Nor is the heat the cause of this type of condition, for it does not apply to those in the womb, whom the sun does not touch . . . .

Both the older and the newer clarifications are based on the concept of environmental determinism according to which environments necessarily affect human physiology.[29]

Alexander's companions were not the first to offer this analogy between Indian and Egypt/Ethiopia. It began with the Homeric insinuation of two sets of Ethiopians—eastern and western (*Od.* 1.23–4); then Aeschylus mentioned Indian women riding on camels near Ethiopia (*Suppl.* 284–6). But whereas these earlier associations may reflect geographical confusion, the fourth-century ethnographers offer a systematic and deliberate comparison, which is based on both the awareness of some similarity and also on the concept of difference.

Why Egypt? Because Egypt was relatively better and longer known to the Greeks, it seems to have functioned as a yardstick for strangeness: lands or peoples (or natural phenomena) could be more or less strange than Egypt or the Egyptians, or could be understood through comparison with Egypt, such as comparing the flooding of the Indus to the Nile (Phil. *VA* 2.18). Moreover, the association of India specifically with Egypt and Ethiopia is based on the traditional ethnographic tendency to ascribe similar traits to people dwelling at the extreme ends of the inhabited world, but it also stems from real similarities between Africa and Southeast Asia since in both there are (1) extreme, hot climates; (2) exceptionally large, overflowing rivers; (3) similar animals—elephants, lions, crocodiles; (4) dark-skinned peoples. Thus, the Hellenistic

texts on India seem to reflect a mental process in which the encounter with the inhabitants (and land) of India first produced a traditional comparison with familiar Hellenic conventions, followed by the next step of measuring these new experiences against the narrower standard of Egyptian characteristics.

Paradoxa—the ultimate ethnographic oddness

The fourth and narrowest mental box within this ethnographic modeling seems to be *paradoxa*. Appearances and behaviors of foreign people, which were understood as dissimilar to human ones, Hellenic, and even Egyptian or Ethiopian ones, were categorized as *paradoxa*. Geographical and ethnographic oddities were a usual component in early geographical writing—for instance in Herodotus, Aristotle, and Ctesias—and prevailed throughout antiquity.[30] In the Hellenistic era, under the influence of the adventures of Alexander, this enthusiasm for oddities increased and produced a lively predilection for astonishing phenomena. This growing interest and demand for more such *paradoxa* produced collections of 'marvels'. In them were included records of unexpected features of the natural world—strange animals, extraordinary plants, unusual rivers or springs—and marvelous details of human life, irregular physiology, and strange social habits.[31] Into these collections, relevant details drawn from the Indian records of Alexander's companions and Megasthenes were incorporated.[32]

In Greek ethnographies of India prior to the expedition of Alexander, there were many extremely strange and even mythical peoples: *Skiapodes* (those who shade themselves with their broad feet); *Otoliknoi* (those who protect themselves with their huge fan-like ears); *Monophthalmoi* (one-eyed people); *Henotiktontoi* (those who give birth once); *Makrokephaloi* (long-headed people);[33] *Kunokephaloi* (dog-headed people); and Pygmies (dwarf people).[34] Surprisingly, these records derived from the written works of two persons who had relatively close access to information on India: Scylax of Karyanda who actually visited parts of India c. 515 BCE as an explorer sent by Darius I and Ctesias of Cnidus who, as a physician of Artaxerxes, spent considerable time at the Persian court. Still, both included such fabulous details in their reports.

By comparison, Alexander's companions who had also visited the region did not refer to these strange tribes, at least not in the fragments we possess. As shown above, they did refer to the customs of the Indian population, which from their point of view were strange in comparison to other known habits, but at the same time they excluded ethnic *paradoxa*. One exception is the comment of Baiton, one of Alexander's bematists,[35] who referred to a certain tribe in the northern borders of India (Baiton *FGrHist* 119 F 5 = Plin. *HN* 7.11):

> . . . in the forests live people with backward feet behind their legs, who run extremely fast and wander all over with wild animals. These people do not breathe in another climate and therefore were not brought neither to the neighboring kings nor to Alexander the Great, as Baiton, his route surveyor reported.

These northern races are different than 'normal' human beings both in the shape of their feet and in their inability to breath in another climate. Their extremely swift gait is again abnormal but is still basically a normal human trait. While, as noted above, Alexander's men usually refrained from telling such incredible stories, interestingly enough, Megasthenes still preserved or remitted to these earlier *paradoxa* (*BNJ* 715 F 27 a = Strabo, 2.1.9):

> Particularly worthy of disbelief are Deimachos[36] and Megasthenes, for they write about the *Enotokoitai* (those who sleep in their ears) and the *Astomoi* (those without

mouths) and *Arrinoi* (those without noses), as well as *Monophthalmoi* (one-eyed people), *Makroskeleis* (long-legged people), and *Opisthodaktuloi* (those with fingers turned backwards).[37]

When looking at such examples, it may be said that the essence of the paradox is in the opposite, and if not exact opposite, then complete difference: something that is entirely unknown and previously unseen and unheard of. It probably derived from exaggerations or misunderstandings. A possible explanation for the relative silence of Alexander's men regarding the paradoxical nations may be found in the fact that they were present in India and did not have to rely on rumors and unreliable testimonies, whereas Megasthenes had a more limited knowledge of the region because he stayed in one place and traveled less. Moreover, perhaps they had their share of anomalies and satisfied their curiosity with the oddities supplied by physical appearance and habits different from Hellenic and Egyptian ones.

Conclusion: Traditional or new model?

The model discussed in this chapter involves narrowing spheres of comparison, from the broadest, mankind, through the less broad, Hellenic, to a narrower still, Egyptian/Ethiopian, and to the narrowest, oddities or *paradoxa*. This model is applicable to both the physical dimension of ethnography related to bodily appearance (*phusis*), and to its behavioral dimension related to custom (*nomos*). It seems that as the circles of actual geographical and ethnographic knowledge widened during and after Alexander's campaigns, so did the circles of 'normality.' While in Herodotus' writings, Egypt was defined as a total opposite to known features and symbolized all that was 'barbaric' and contrary to ordinary Greek life, in the records of Alexander's companions and Megasthenes, its position as a yardstick is changed and, in a way, it is 'upgraded' to become a standard for normality, just a lesser form of it. In other words, what formerly was considered odd, gradually became less so, and the core of ethnographic oddities expanded to include even more extreme physical and behavioral phenomena to coincide with the larger space of geographical knowledge.

As it became 'normalized,' Egypt became less of an exotic attraction and thus did not deserve or require extensive references. Alexander's men, although they did accompany the King on his campaign in Egypt as well, did not refer to Egyptian customs or other ethnographic details related to Egypt. In the surviving fragments, there are no allusions to Egyptian habits, neither in Nearchus nor in Aristobulus; Onesicritus, on the basis of the overall fertility inspired by the Nile, merely laconically comments that Egyptian women sometimes bear quadruplets (Onesicritus *BNJ* 134 F22 = Strabo 15.1.22). Egypt and Egyptians thus became less unusual and almost normal, and thereby served as another level for comparing more newly explored regions and peoples.

Interestingly enough, it might be significant that the Greek term '*barbaros*' and its derivatives, which is the most clear polar indication of ethnic difference, is rare in the surviving fragments of the presently discussed texts (not once in Onesicritus and Megasthenes). The rarity or total absence of this basic dichotomic term may support the assumption demonstrated in this model of a gradual change towards a more complex ethnographic worldview that is not based on a binary polar concept.[38]

Notes

1 On earlier Greek encounters with India, see Karttunen 1989.
2 On these authors, see Pearson 1960; Pédech 1984; Karttunen 1997, 2–6. For a collection of fragments, see Müller 1846 and respective sections in *FGrHist*. Several authors have updated sections in *Brill's New Jacoby* (= *BNJ*).

3 Fragments: *FGrHist* 715 and *BNJ*; discussion: Majumdar 1958; Bosworth 1996.
4 Lloyd 1966. Specifically on Herodotus' geographical concepts, see pp. 341–5. There is no discussion of Greek ethnographic texts.
5 Guthrie 1965, 55–134; McKirahan 1994, 405–26; Kahn 2003, 1–8.
6 Heraclitus F 114 DK; Hes. *Op.* 276.
7 Accordingly, anthropological theories of degeneration or progress were formed. Ideas of progress adhered to *nomos* as raising mankind above the level of beasts. See Guthrie 1962, 60–63. See also now Van Norden 2015, 57–63.
8 See Kennedy, this volume.
9 Onesicritus comments that the people in the land of Mousikanos also live to 130 years: *BNJ* 134 F24 = Strabo 15.1.34. I have used *BNJ*'s good and new translations of Onesicritus, Nearchos, Aristobulus, and Megasthenes, by Michael Whitby, Frances Pownall, and Duane Roller. Translations of other authors are mine.
10 Brown 1949, 64–5; Skinner 2012, 59–82.
11 The Hyperboreans: Pind. *Pyth*. 10.41–4; the Ethiopians: Hdt. 3.114. See also Bosak-Schroeder, this volume.
12 Romm 1992.
13 Karttunen 1997, 70–93.
14 It has also been noted that certain authors had their own agendas affect their *interpretatio Graeca*, for instance the Cynic interpretation of the Indian wise men by Onesicritus, in Karttunen 1997, 55–64, and the Greek concepts behind Megasthenes' castes, in Karttunen 1997, 82–7. Kosmin 2013 also senses a military and political agenda behind Megasthenes' representation of Indian urbanism.
15 See Kosmin 2013, 99–104.
16 These are utopic elements associated with remote peoples and specifically with the Indians. See Brown 1949, 54–72, esp. 57–61; Pédech 1984, 120–23; Romm 1992; Karttunen 1997, 77–9; Vivero 2003. Although Alexander's companions and Megasthenes actually visited India, they still adhered to the ethnographic utopic tradition. See also Van Norden 2015, for the influence of Hesiod's 'races of man' on the utopic traditions.
17 On which, see Brown 1949, 54.
18 Harrison 2003.
19 Brown 1949, 95–9.
20 Harrison 2003; Skinner 2012, 99–106.
21 Analyses of this famous *locus* abound, and see for instance Vasunia 2001, 75, 87, 92; Harrison 2003; Gruen 2011, 76–90.
22 On Herodotus and the *phusis/nomos* distinction, see Thomas 2000, 102–34.
23 For instance, Skinner 2012, 103.
24 Vasunia 2001, 75–94.
25 'Pale' skin was primarily a mark of femininity, illness, and northern climate. On skin color as an indicator of gender and ethnicity, see Sassi 2001, 1–33. There is a large body of scholarship on blackness in antiquity. For bibliography on the Greek (and Roman) attitude to human black skin, see Gruen 2011, 197–220. On the (non-)existence of 'whiteness' as a category of ethnic distinction in antiquity, see Dee 2003.
26 This specific comment is not ascribed in Jacoby's collection to a specific author, but since sections immediately preceding and following this one are taken from Alexander's men and Megasthenes, it is very likely that this one too originated in their views. In the second century CE, Philostratus *VA* 3.20 links Egypt, Ethiopia, and India as related peoples through the tale of the murder of King Ganges.
27 Hdt. 3.101.1–2; Ctesias: *FGrHist* 688 F45a (19); Arist. *Soph. el.* 5. 167a7. Herodotus attributes the shared color to black semen. Aristotle directly refutes Herodotus with respect to the Ethiopians at *Hist. Anim.* 3.22 (523a17–18).
28 This cause was more often concerned with the Ethiopians, but since the Indians were compared to them in their tone of skin, the same cause became applicable to them as well. See Hdt. 2.22.3; Ktesias *BNJ* 688 F45a (19), who does not accept this explanation but does not offer an alternative; Theodektes F17 Snell.
29 The *locus classicus* for this is the well-known section in the Hippocratic *Aer*. 12–14. See Kennedy and Irby, this volume. The Herodotean section on the Egyptians quoted on p. 346 clearly associates the unusual customs of the Egyptians with the unusual climatic and geographical conditions in the region.
30 See Garland, this volume.

31 Jacob 1983; Schepens and Delcroix 1996.
32 On the lasting influence of these books of marvels into the medieval and early modern periods, see Halpern and Scully, this volume.
33 In Skylax of Karyanda: *BNJ* 709 F7a, b.
34 In Ctesias: *BNJ* 688 F45.
35 A person who measures distances by paces.
36 Deimachos was Megasthenes' successor as a Seleucid ambassador to India. Most of his work is lost.
37 These tribes appear also in Pliny the Elder *HN* 7.6, 9–32 attributed to Megasthenes.
38 See Dueck 2015.

Bibliography

Bosworth, Albert. B. 1996. "The Historical Setting of Megasthenes' Indica." *Classical Philology* 91: 113–27.

Brown, Truesdell. S. 1949. *Onesicritus. A Study in Hellenistic Historiography*. Berkeley and Los Angeles: University of California Press.

Dee, John H. 2003. "Black Odysseus, White Caesar: When Did 'White People' Become 'White'?" *Classical Journal* 99: 157–67.

Dueck, Daniela. 2015. "Knowledge of Self." In *Companion to Greek Literature*, edited by Martin Hose and David Schenker, 386–400. Oxford: Wiley-Blackwell.

Gruen, Erich. S. 2011. *Rethinking the Other in Antiquity*. Princeton, NJ: Princeton University Press.

Guthrie, W.K.C. 1962. "The 'Nomos'-'Physis' Antithesis in Morals and Politics." In *A History of Philosophy*, vol. 3, 55–134. Cambridge: Cambridge University Press.

——. 1965. *A History of Greek Philosophy. II: The Presocratic Tradition from Parmenides to Democritus*. Cambridge: Cambridge University Press.

Harrison, Thomas. 2003. "Upside Down and Back To Front: Herodotus and the Greek Encounter With Egypt." In *Ancient Perspectives on Egypt*, edited by R. Matthews and C. Roemer, 145–56. London: University College of London Press.

Jacob, Christian. 1983. "De l'Art de Compiler à la Fabrication du Merveilleux: Sur la Paradoxographie Grecque." *Lalies* 2: 121–40.

Kahn, Charles. 2003. "Presocratic Greek Ethics." In *A History of Western Ethics*, 2nd edn., edited by Lawrence Becker and Charlotte Becker. New York and London: Routledge.

Karttunen, Klaus. 1989. *India in Early Greek Literature*. Helsinki: Finnish Oriental Society.

———. 1997. *India and the Hellenistic World*. Helsinki: Finnish Oriental Society.

Kosmin, Paul. 2013. "Apologetic Ethnography: Megasthenes' *Indica* and the Seleucid Elephant." In *Ancient Ethnography: New Approaches*, edited by Eran Almagor and Joseph Skinner, 97–115. London: Bloomsbury.

Lloyd, G.E.R. 1966. *Polarity and Analogy: Two types of Argument in Early Greek Thought*. Cambridge: Cambridge University Press.

Majumdar, Ramesh. C. 1958. "The Indika of Megasthenes." *Journal of the American Oriental Society* 78: 273–6.

McKirahan, Richard. D. 1994. *Philosophy before Socrates: An Introduction with Texts and Commentary*. Indianapolis, IN: Hackett.

Müller, Karl. 1846. *The Fragments of the Lost Historians of Alexander the Great*. Paris. Reprinted in Chicago, IL: Ares, 1979.

Pearson, Lionel. 1960. *The Lost Histories of Alexander the Great*. New York: American Philological Association.

Pédech, Paul. 1984. *Historiens Compagnons d'Alexandre. Callisthène, Onésicrite, Néarque, Ptolémée, Aristobule*. Paris: Les Belles-Lettres.

Romm, James. S. 1992. *The Edges of The Earth in Ancient Thought: Geography, Exploration and Fiction*. Princeton, NJ: Princeton University Press.

Sassi, Michela M. 2001. *The Science of Many in Ancient Greece*. Chicago, IL: University of Chicago Press.

Schepens, Guido. and Delcroix, Kris. 1996. "Ancient Paradoxography: Origin, Evolution, Production and Reception." In *La Letteratura di Consumo nel Mondo Greco-Latino*. (*Atti del Convegno Internazionale, Cassino, 14–17 Settembre 1994*), edited by O. Pecere and A. Stramaglia, 373–460. Cassino: Università degli Studi di Cassino.

Skinner, Joseph. E. 2012. *The Invention of Greek Ethnography: From Homer to Herodotus*. Oxford: Oxford University Press.
Thomas, Rosalind. 2000. *Herodotus in Context: Ethnography, Science and the Art of Persuasion*. Cambridge: Cambridge University Press.
Van Norden, Helen. 2015. *Hesiod's Races of Man*. Cambridge: Cambridge University Press.
Vasunia, Phiroze. 2001. *The Gift of the Nile: Hellenizing Egypt from Aeschylus to Alexander*. Berkeley: University of California Press.
Vivero, M.Albaladejo. 2003. "Elementos Utopicos en la India Descrita por Onesicrito." *Polis* 15: 7–33.

20
THOSE HAPPY PEOPLE
Arabia Felix and the astrological *oikoumenē* of Claudius Ptolemaeus

Joanna Komorowska

Ptolemy's *astrologia universalis*

Ptolemy's exposition of *astrologia mundana,* the *Apotelesmatica* (also known as the *Tetrabiblos*), stands in contrast with those known from Manilius, Dorotheus or, indeed, his near-contemporary Vettius Valens. His system of *sunoikeiōseis* linking different regions of the known *oikoumenē* to existing Zodiacal constellations, borders on geometrical. In keeping with the overall character of his work, the distribution of terrestrial regions, ruled by four astrological triplicities (*trigōonoi*) reveals a relatively simple underlying order. Effectively, the system links every triplicity with a geographic direction.[1] The associations are outlined in *Apotelesmatica* 2.3 (Table 20.1).

An organizing principle very much like that employed in the original section of the *oikoumenē* is then (re)applied to the centrally located lands—their position, according to our author, should be considered in respect to that of the whole quadrant—thus, for example, Greece, as positioned to the southeast of the north-western part of the *oikoumenē*, participates in the nature of the triplicity directly opposite (corresponding to the modern earth triplicity).[2] This seemingly minor maneuver solves the problem stemming from the position of Asia Minor and its lands: obviously a part of the Asian continent, the peninsula is nevertheless located to the west of the continent. Should we wish for a truly longitudinal division, the line created along the Tanais River separating Europe from Asia would necessarily eliminate a large part of Asia from being a part of the continent. Indeed, Ptolemy argues that the *litora Asiae Minoris* (lands considered to be Greek) fall within the north-western quadrant rather than the south-eastern one, a change that ensures that they display traits associated with mainland Greece rather than eastern realms

Table 20.1 Ptolemy's triplicities with their connections to geography and ordinal directions

Aries-Leo-Sagittarius	North-West	Jupiter	North
		Mars	West
Taurus-Virgo-Capricorn	South-East	Venus	South
		Saturn	East
Gemini-Libra-Aquarius	North-East	Saturn	East
		Jupiter	North
Cancer-Scorpio-Pisces	South-West	Mars	West
		Venus	South

of Persia, even when we account for the interference of opposing triplicity. Moreover, Ptolemy posits a concept of centrality that allows for a double affinity in the central regions: these display features characteristic to two triplicities at the same moment.[3] Interestingly, however, this *krasis*, though occurring between dissimilar elements and influences, does not necessarily result in a deteriorated or vitiated influence; on the contrary, the combination of the north-western and the south-eastern triplicities brings forward a number of desirable qualities, such as hospitality or love of justice, while the south-western triplicity combined with the north-eastern one endows the inhabitants of Cyrenaica and neighboring lands with love of the divine, patience, ability to interpret oracles, etc.[4]

In order to fully appreciate Ptolemy's great attempt at simplifying universal or mundane astrology, one needs to project the triplicity onto the known *oikoumenē* as divided into four quadrants. The horizontal axis bisects *Mare Nostrum*, the Mediterranean, and then follows eastwards along the line Taurus-Karakoram. The other, longitudinal and seemingly more erratic, runs through the Azov (Maeotis), the Black, Aegean, and Red Seas. Thus, it reflects the traditional division of the *oikoumenē* as it emerged as early as the Hippocratic treatise *Airs, Waters, Places*,[5] and which firmly located the Aegean in the very center of the inhabited world.[6] Mapping Ptolemy's divisions onto a modern map elicits the following distribution (see Table 20.2).

While the longitudinal axis and the distribution of the eastern lands between northern and southern hemispheres may at first glance appear erratic and uneven to the modern eye, it needs to be considered first against the traditional division, stressing the differences between the three continents known at the time, and then against the world maps known in the second century CE. Indeed, the shape of the *oikoumenē* described by Ptolemy in the *Apotelesmatica* alone poses a considerable problem in the interpretation of the work: major discrepancies between the data provided here and in the geographical *opus* of the author led Boll to argue in favor of *Geographia*'s posterior date, and then to assume that the map employed in the division was similar to that of Dionysius Periegetes, and, as a consequence, to that famously sketched by the great Posidonius himself.[7] As we know, the philosopher portrayed the inhabited world as a sling-shape circumscribed by the sea—the sling remained somewhat uneven, with Asia (traditionally considered to constitute the largest continent) extending far to the east.[8] One may additionally note that this shape agrees with the general remark that the inhabited world is located in a limited section of the earthly globe: the region which we inhabit is in one of the northern quarters (2.2.2). The possible importance of this short note is emphasized by Aujac, who anticipates a major problem linked to the introduction of the issue: if the *oikoumenē* occupies not more than one-fourth of the whole globe, what is the astrological status of the other parts?[9] The point, however, is never addressed by Ptolemy in the analyzed work and no mention of antipodes nor antichthones is ever made in the *Apotelesmatica*:[10] one may suspect that the astrologer considered the issue irrelevant to his argument, or—as seems far more likely—irrelevant within the inherited frames of astrological doctrine.[11] Additionally, one should keep in mind that Ptolemy's argument is, or at least seems to be, adapted to popular geographical knowledge (hence the permanence of the 'Dionysian' shape of the *oikoumenē*): this latter, should we follow Nicolet, is somewhat limited by the stretch of the Roman might. Britannia

Table 20.2 Distributions along axes

North-West	**North-East**
Europe	Lands north from the line Taurus/Himalaya
South-West	**South-East**
Northern Africa	Lands south from the line Taurus/Himalaya

in the West, the latitude of Rhone in the North, the Sahara Desert in the South and western coast of India in the East mark the limits of the known *oikoumenē* for the major part of the inhabitants of the empire.[12] One may say that, in accordance with the typical Hellenocentrism of Greek astrology, Ptolemy refuses to discuss what can only be termed alternate *oikoumenai*—yet, in this, he comes very close to the views expressed by an earlier writer, namely Strabo, according to whom descriptive geography (in contrast with its astronomical counterpart) needs not pay attention to the zones of earth that fall outside the inhabited region, a remark of outstanding importance when considering the place of premises in ancient scientific studies.[13] Thus, once we have agreed that the primary aim lies for the Alexandrian in reconciling astrology (understood as an inherited system of dogmas and interpretative rules) with what was considered in his own time a scientific pattern of thought, it seems logical that the cosmological thought experiments assuming the existence of four mirror *oikoumenai* would be naturally left out of his exposition.

But there is more to the *Apotelesmatica* than this; while it seems plausible to defend Ptolemy on the grounds of irrelevance, a far more tempting possibility opens once we observe the exposition of the lore itself. Indeed, a careful study reveals several important shifts of perspective that occur in Book Two of the *Apotelesmatica*, enabling Ptolemy to discuss various astrological dogmas linked with the universal theory. One of these shifts falls between the second and the third chapter: while the former deals with the latitudinal division of the earth understood as a globe, and thus implies a cosmological perspective, which certainly justifies the mention of the *oikoumenē* being positioned in a certain region of the northern hemisphere, the perspective employed in the latter is narrowed to the *oikoumenē* alone. In this way, neither the bisection of the inhabited world, nor its consequences need to be considered with a view to Crates' cosmological assumptions. And, once we accept that the passage in 2.2 is intended as a simple reference to a certain cosmological paradigm, the question of *antipodes* and their position within the astrological doctrine fades into the background. One may in fact assume that something entirely contrary to what was described by Aujac is taking place: namely, by force of his apparently clear exposition, Ptolemy succeeds in banning the potentially anti-astrological presumption from the mind of his reader.[14] Still, given that the matter in question deserves a separate discussion, let us return to the main line of present considerations.

The close reliance on the nature of the four triplicities is the first of many unusual features to emerge in the chapter. Moreover, it should be regarded in close connection with the overall importance of planetary influence so clearly emphasized throughout the work.[15] Obviously, the above schema remains rudimentary: to arrive at more satisfactory results, one has to consider the actual rulership of each single sign—yet this secondary division cannot obscure the simplicity and quasi-perfect methodological premises of the underlying pattern. As a result, Ptolemy's arrangement, in spite of its apparent simplicity, is highly sophisticated, being vastly different from those already in existence (the main difference lies in the very orderliness of the pattern)[16] and it is hard not to think that the author, despite his never alluding to the doctrine, was actually aware of the elemental associations of the triplicities, associations well known to his contemporary Vettius Valens.[17] The additional justification could possibly be found in theories discussed by Manilius, but similarly never acknowledged in the *Apotelesmatica*: the existence of a royal trigon, of running, standing, and crawling constellations, etc.[18] Moreover, one may also think of the Babylonian custom of denoting the four directions of the world with four quadrants of visible sky; the choice was not made by chance, nor was it occasioned by the shape of Dionysius' world. In Book One (and then in 2.3), Ptolemy makes a point of linking the astrological theories to the observable features of the world, of providing them with an empirical, incontestable base that may serve as their explanation and justification.

As easily observed in Book One of the *Apotelesmatica,* the division into triplicities forms the basis of Zodiacal differentiation: it is this very division that facilitates parallels with four directions of the world and four principal winds—constructing any universal theory on another basis, such as tetragonal aspect, would, one may suspect, raise far more questions.[19] Here, as in numerous other points of Ptolemy's work, we are able to observe his preoccupation with the physical and scientific nature of astrological lore: the fourfold division (four triplicities ruling the inhabited world) allows for an easy association with other such divisions operational in ancient thought, such as four natural elements, four principles, four winds, etc., while the intrinsic emphasis on the number three may be taken as a reflection on the supreme nature of astral triplicity (aspect connecting signs of similar nature), and at the same is also demanded by the contemporary preoccupation with groupings of three (three levels of being, three metaphysical principles, etc.).[20] The striking feature of this triplicity pattern is the near absence of Mercury, due to its nature as *epikoinos* (a planet belonging both to the diurnal and nocturnal sect, and thus participating in the characteristics of both respective groups). This absence may constitute a conscious allusion to the doctrine of sects (*haireseis*), an essential element of Ptolemy's system: the sect to which a planet belongs influences its relation with the Sun.[21] This absence, however, does not exclude the participation of the planet in the more detailed divisions: we will observe this characteristic further on.

Now, there are two major questions that need to be answered in discussing Ptolemy's organizational system: first, how far do the characteristics of nations described by the author fit the features of human character he and other astrologers associate with the respective triplicity, Zodiacal sign or planet—that is, the astrological implications of Ptolemy's system. However, since astrology is not the main focus of present inquiry, it is enough to merely review the basic outlines: Mars rules warrior nations, Mercury the regions where sciences are held in higher esteem, etc.[22] Next, there is a question of how far Ptolemy's descriptions are based on the contemporary stereotypes that shape perception of respective nations.[23] Even to attempt an answer requires references to the immense body of earlier and contemporary literature: what we are seeking to establish is whether the Alexandrian's attribution is influenced by the preconceptions and prejudices dominant in his milieu (or in the cultural milieu of the second century CE), and if so, to what extent these preconceptions shape the contents of *Apotelesmatica* 2.3.

To appreciate the intricacies and symmetry of Ptolemaic attribution, one needs, however, a table of far greater complexity than those featuring so prominently in (for instance) the Loeb edition of the *Apotelesmatica* or in Bouché-Leclerq's *L'Astrologie*.[24] While the image of the astrological *oikoumenē* is easiest to understand when looking at the map (see Figure 20.1), the actual rules of *sunoikeiosis* result in the following division of the *oikoumenē* (see Table 20.3).

Even a cursory look at this table reveals some interesting characteristics of Ptolemy's division: first and foremost, the map is something of an intellectual construct—one encounters considerable difficulties when attempting to superimpose Ptolemaic vision even on a simplified outline of the sling-shaped *oikoumenē*. Next, one notes the strikingly even distribution of terrestrial regions. Three lands are usually associated with each sign (or rather, three for the direct influence and three in the opposite quadrant). It may be reasonably argued that to achieve the desired balance, as well as an overall impression of symmetry, Ptolemy employs several tactics in his account of *astrologia universalis*. First of all, some of the regions he names in the work remain notably absent from other astrological works, even those discussing the detailed *kata meros* attribution. Even more strikingly, several lands named in the *Apotelesmatica* are missing from the author's own *Geographia*:[25] the most important case, highlighted by Aujac, is *Casperia*: never in the other treatise does the word appear as the name of a region.[26] The 'invention' of these places gains even more significance when one realizes that some regions of particular

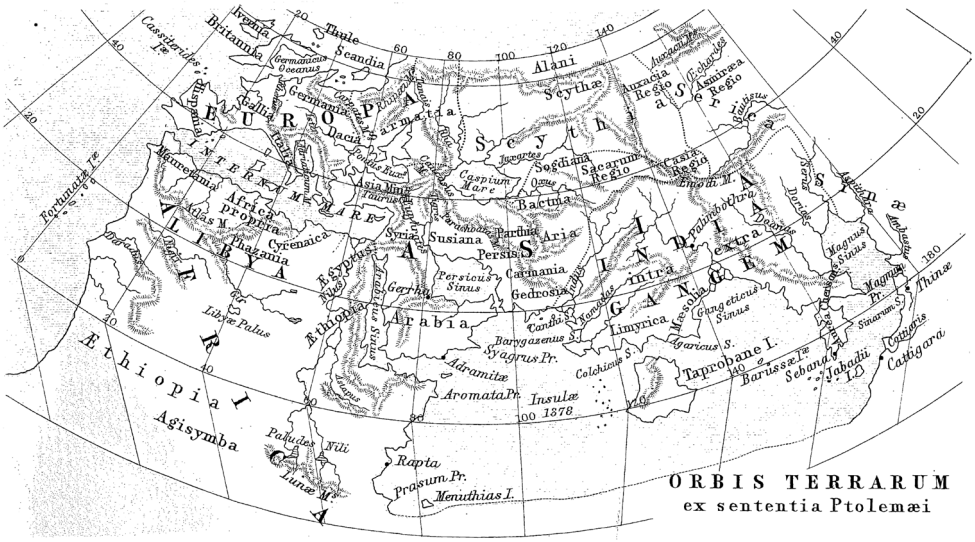

Figure 20.1 The world according to Ptolemy (section of map 4, from *Ginn and Company's Classical Atlas,* Boston, 1894; map attributed to W. and A.K. Johnston)

Table 20.3 The astrological distribution of nations

Triplicity	*Planets*	*T II*	*Planets*	*Sign*	*Ruler*	*Regions*
N-W	Jupiter			Aries	Mars	Britannia, Galatia, Germania, Bastarnia
N-W	Jupiter			Leo	Sun	Italia, Gallia, Apulia, Sicilia
N-W	Jupiter			Sagittarius	Jupiter	Tyrrhenia, Celtica, Hispania
N-W	Jupiter	S-E	Venus	Taurus	Venus	Cyclades, Ora Asiae Minoris, Cyprus
N-W	Jupiter	S-E	Venus	Virgo	Mercury	Graecia, Achaia, Creta
N-W	Jupiter	S-E	Venus	Capricorn	Saturn	Thracia, Macedonia, Illyria
S-E	Venus			Taurus	Venus	Parthia, Media, Persia
S-E	Venus			Virgo	Mercury	Babylonia, Mesopotamia, Assyria
S-E	Venus			Capricorn	Saturn	India, Ariana, Gedrosia
S-E	Venus	N-W	Jupiter	Aries	Mars	Coelesyria, Iudaea, Idumaea
S-E	Venus	N-W	Jupiter	Leo	Sun	Phoenicia, Chaldaea, Orchenia
S-E	Venus	N-W	Jupiter	Sagittarius	Jupiter	Arabia Felix
N-E	Saturn			Gemini	Mercury	Hyrcania, Armenia, Matiana
N-E	Saturn			Libra	Venus	Bactriana, Casperia, Serica
N-E	Saturn			Aquarius	Saturn	Sauromatica, Oxiana, Sogdiana
N-E	Saturn	S-W	Mars	Cancer	Moon	Bithynia, Phrygia, Colchis
N-E	Saturn	S-W	Mars	Scorpio	Mars	Syria, Commagene, Cappadocia
N-E	Saturn	S-W	Mars	Pisces	Jupiter	Lydia, Pamphilia, Cilicia
S-W	Mars			Cancer	Moon	Numidia, Carthago, Africa
S-W	Mars			Scorpio	Mars	Metagonitis, Mauretania, Gaetulia
S-W	Mars			Pisces	Jupiter	Phasania, Nasamonitis, Garamantica
S-W	Mars	N-E	Saturn	Gemini	Mercury	Cyrenaica, Marmarica, Lower Egypt
S-W	Mars	N-E	Saturn	Libra	Venus	Thebais, Oasis, Troglodytis
S-W	Mars	N-E	Saturn	Aquarius	Saturn	Arabia, Azania, Aethiopia

importance appear to be missing from the account: thus, no mention is made of Carmania, which on Strabo's map occupies a place to the west of the Gedrosian wilderness, or of the northern land of the Massagetae, known to Greeks since the times of Eudoxus.[27] Similarly, one notes the absence of the Roman provinces Raetia, Noricum, and Pannonia; certainly, there is some difference between an omission involving a land quite remote from what one considers the very center of the universe and one involving a region immediately neighboring carefully described lands of a central location, particularly as the Apennine Peninsula receives a detailed treatment.[28]

Reasons for these omissions are not easily apparent unless we decide to follow Bouché-Leclerq and Boll in their outright criticism of Ptolemy's negligence. However, one may well think that the Alexandrian not only had a reason to not mention the Pannones, but also to think that the omission would never be noticed. After all, given all the effort put into the scientific aspect of the *Apotelesmatica,* it would be highly surprising if he just forgot to mention considerable portions of Europe. Still, interesting exceptions to this 'three lands' principle do appear: thus, for example, two signs of the triplicity, Aries and Leo, when discussed in terms of direct influence, remain related to four regions each.[29] Even more exceptional is the case of the combined influence of the south-east triplicity with the northwestern sign of Sagittarius. This shows affinity with Arabia Felix alone, the land forming the single exception to the otherwise manifest preference for symmetrical attribution. It is an interesting exception, illuminating for reasons both scientific (as far as Ptolemy's methodology is concerned) and cultural; indeed, an exception which may be of some importance to our understanding of the man behind the *Apotelesmatica*, but also for the perception of the forces motivating his choices in the work.

Before we address the issue of Arabia's uniqueness, it might be useful to address some issues intrinsic to Ptolemy's image of the *oikoumenē* as drawn in the *Apotelesmatica*. First, some names important in the list of *Apotelesmatica* are missing from the world description in the *Geographia*, and the other way around. One may safely conclude that the discrepancies may be due to the difference of purpose: the latter work, considered nowadays to constitute a manual of map-making,[30] aims at providing a comprehensive image of the world as it is and as it is to be administered, and the *Apotelesmatica* refers to a much less defined framework of common assumptions and cultural associations: consequently, the list of cities and villages that fills the *Geographia* is a far cry from the ethnological focus of the *Apotelesmatica*. Hardly surprisingly, when one tries to project the map from the *Geographia* onto the image of the world as it emerges in the *Apotelesmatica*, the difference of the very assumptions concerning the actual shape of the terrestrial universe effectively disables the attempt: *Apotelesmatica* relies on the flat world image, which, while quite frequently used in imperial culture, was at the same time at odds with the known spherical shape of the earth.[31] But the differences do impact many more specific issues. Where, for example, should we locate the Aethiopes? The map of the *Apotelesmatica* puts them south of Egypt, but how far southwards does their realm extend? In the allegedly later *Geographia* the world image extends downward along the Somalian peninsula and mentions the Island of Rhypare. Yet, the *Aethiopes* of the *Apotelesmatica* inhabit a centrally located land (2.3.50), suffering the combined dominion of Saturn and Mars. Then, some regions that will be discussed in detail in the newer work do not emerge in the *Apotelesmatica*: e.g. no explicit mention is made of Rhaetia, Noricum, Vindelicia (one could, however, argue that these are bundled together with other 'German' regions: such an assumption would naturally imply that these latter occupy far more space on the *Apotelesmatica* map than they do on that derived from the *Geographia*). No mention is made of Sarmatia in the *Apotelesmatica* and the lands north of the Black Sea—divided by the vertical axis, the lands are nevertheless granted some attention in the other treatise (one may, however, wonder whether 'Thracia' is meant to encompass these regions as well).

As demonstrated by the very fact that the two world axes meet above the Aegean Sea, the world image of the *Apotelesmatica* is essentially Hellenocentric:[32] this feature, for instance, accounts for the detailed description of the nations inhabiting Asia Minor. In contrast, the lands farther from Greece, on the periphery of the known world, are awarded little, if any, attention—all of Spain is dismissed under one heading, as are the inhabitants of Britannia and Germania, and no mentions are made of either Hibernia (Ireland) or Thule, though both islands are discussed in the *Geographia*. Certainly, some causes of this should be sought in the usual attitude that an educated member of Greek society would harbor toward societies considered barbarian (a circumstance we shall discuss further on), but it is easy to understand that the distance separating some regions from the center would influence the way they were treated by the astrologer. Quite understandably, the peripherals, having little or no bearing on the author's homeland, would be treated with less attention than lands immediately neighboring Egypt or Greece. On the other hand, this emphasis on the eastern part of the Mediterranean world is linked to the general premises on which Ptolemy's system of attributions is built: what concerns Ptolemy most (a focus natural for a representative of the Greco-Roman world) is the central, moderate part of *oikoumenē*, where the environmental conditions favor the development of culture and civilization. Indeed, this is the characteristic of temperate climates being highlighted in 2.2.

Three mentions are made of the region of Gallia, associated with Aries (Galatia), with Leo (Gallia), and, finally, with Sagittarius (Celtica). We know that the division of the region was fourfold in the *Geographia*, where the terms reflect the official usage: Aquitania, Belgica, Narbonensis, Cisalpina. Obviously, in the *Apotelesmatica* we are faced with a simpler division, a fact that results in a question of the exact distribution: which sign rules the respective parts of Gaul? Given the orderliness of Ptolemy's arrangement, the answer must stem from the geographical position of the regions involved. Therefore, Gallia Belgica, in the north of the whole land and adjacent to the German frontier, would be subject to the sign of Aries, ruling Germania and Bretania.[33] On the other hand, the link with Sagittarius would suggest that Ptolemy's Celtica corresponds to the region of Aquitania. This, in turn, implies that the term 'Gallia' (under the sign of Leo) would probably denote either the region of Gaul that had long been regarded as a part of the civilized world (i.e. the Narbonensis), or, more plausibly, the Cisalpina (as all other lands governed by Leo are located in the Apennine Peninsula).[34]

The apparent order and systematic nature of this arrangement drew the attention of several scholars, provoking vastly differing reactions: thus, while Bouché-Leclerq highlights the forced character of the proposed system of astrological affinities, Aujac is quick to regard the same features as mirroring Ptolemy's preference for the systematic.[35] The latter view could possibly serve as a support for both Platonic and Aristotelian readings of Ptolemy: both of the philosophers displayed some inclination to view the universe in terms of mathematical symmetries and parallels. Moreover, it allows for yet another important point to be made: in highlighting the importance of order in Ptolemy's writings, Aujac comes close to acknowledging that a set purpose dictated the choice of the employed world-picture. Indeed, her remarks on the "forced character" of the proposed system of affinities may be regarded as an unnecessary denigration of something that may have constituted a major intellectual achievement: that is, a systematic, orderly arrangement of a universal doctrine, an arrangement quite possibly relying on an outdated set of geographical assumptions. The issue is that one must distinguish between geography and astrological geography: while the former is a descriptive science, whose primary aim is to construct maps, the latter, at least in the *Apotelesmatica* 2.3, strives to explain certain regularities manifest in the universe.

As was already mentioned, the symmetry theory suggested by the French scholar stumbles on the region of Arabia Felix—and this particular obstacle would certainly call for some attention; if Ptolemy were so keen on upholding the triplicity arrangement throughout the system, why would he decide to make either Arabia Eudaimon, or, inversely, the Earth-Sagittarius combination, his only exception to the general rule? To understand this particular, we will have to look both into the ancient ethnography and into the lore concerning the nature of planets and Zodiacal signs.

The astrological uniqueness of Arabia

Let us now turn to the principal focus of this essay, the region known as Arabia Eudaimon, or (for the Latin-speaking populace) Arabia Felix. Separated from the eastern coast of Egypt/Aethiopia by the Red Sea and from the northern part of the peninsula by the vast region of Nejd (Arabia Deserta),[36] it is located at considerable distance from the other inhabited parts of the *oikoumenē*. Indeed, most military expeditions aimed at its subjugation were lost before even arriving within the realm.[37] Located in the southeast, it falls under the rule of the appropriate triad and its lord, the planet Venus, but due to its central position on the map, it falls within the province of the northwest triad governed by Jupiter, the latter's influence further enhanced by its position with respect to the lands of Iudaea, Phoenicia, or Chaldaea. One promptly notes that the territories in question are described in anything but complimentary terms in 2.3.29–31:

> The remaining parts of the quarter, situated about the centre of the inhabited world, Idumaea, Coele Syria, Judea, Phoenicia, Chaldaea, Orchinia, and Arabia Felix, which are situated toward the north-west of the whole quarter, have additional familiarity with the north-western triangle, Aries, Leo and Sagittarius, and, furthermore, have as co-rulers Jupiter, Mars, and Mercury. Therefore these people are, in comparison with the others, more gifted in trade and exchange; they are more unscrupulous, despicable cowards, treacherous, servile, and in general fickle, on account of the stars mentioned.

Hardly surprisingly, the worst are inhabitants of the regions ruled by Aries: godless, scheming, and audacious, the people of Iudaea, Idumea, and Coele Syria stand out as the least attractive members of the group, hardly outdone by the learned sun-worshippers of Chaldea, Phoenicia, and Orchenia (ruled by Leo). The *Arabes* are the best of the group, renowned for their *eleutheria* (in contrast to the servility mentioned in the group description) and talent for commerce:

> The inhabitants of Arabia Felix are familiar to Sagittarius and Jupiter; this accounts for the fertility of the country, in accordance with its name, and its multitudes of spices, and the grace of its inhabitants, and their free spirit in daily life, in exchange, and in business. (2.3.32; trans. Robbins).

In contrast, the territories immediately neighboring the Arabia Felix belong to the south western triplicity and the sign of Aquarius: thus, the rule of this particular combination extends over Azania,[38] Central Ethiopia, and Arabia, the latter obviously being the Petraea and/or the Deserta (both locations share the destructive nature of Saturn, ruler of the triplicity nowadays associated with the element of air). As a result of their connection to the planet known for its dry and cold nature (see *Apotelesm*. 1.4), the territories involved are portrayed as dry, barren wastelands, inhabited by scattered tribes of nomads, thus forming the exact opposite of the cultivated, grain-bearing

soil of civilized countries, but also of the naturally fertile, spice-producing soil of Arabia Felix: "The people of Arabia, Azania, and Middle Ethiopia are familiar to Aquarius and Saturn, for which reason they are flesh-eaters, fish-eaters, and nomads, living a rough, bestial life (*agrion kai thēriōdē bion*)" (2.3.50; trans. Robbins).

The astrological explanation for this vivid, yet—given the neighboring position of the lands—somewhat startling difference is to be sought in the radically different character of their rulers Saturn (Arabia, Azania, Middle Ethiopia) and Jupiter (Arabia Felix). The former planet stands for the desert and inhospitable lands, an association very much in keeping with its cold and dry, life-inhibiting nature, as this latter is described in *Apotelesmatica* 1.4.3: "It is Saturn's quality chiefly to cool and, moderately, to dry, probably because he is furthest removed both from the sun's heat and the moist exhalations from the earth" (trans. Robbins).

Meanwhile, Jupiter displays affinity with regions blessed with abundance of life and riches or with the appearance of rare and precious substances—this mirrors its intrinsically beneficial character outlined in 1.4.5:

> Jupiter has a temperate, active force because his movement takes place between the cooling influence of Saturn and the burning power of Mars. He both heats and humidifies; and because his heating power is greater by reason of the underlying spheres,[39] he produces fertilizing winds (trans. Robbins).

Reflecting this essentially fertile (*gonimos*) nature of Jupiter's influence, the abundant fertility of Arabian soil (a point to which we will return) may be perceived as the special gift of the planet, lord of both north-west triplicity and of Sagittarius, its influence further reinforced by the association with similarly beneficial Venus as ruler of south-east triplicity: the two benefics are associated with the land, the precedence given to 'the' benefic, the most benevolent and fertile of all planets. The resulting image is one of overwhelming generosity and beneficence, of singularly favorable astral affinity; befitting its name, Arabia Felix enjoys the triple benefits of being governed by Venus and Jupiter (doubly) with Sagittarius.

Such 'double' rulership (triplicity + sign) remains relatively rare in his *sunoikeiosis* system: in fact, the present case is unique for Jupiter. Hence, it is instructive to outline similar instances: two of these entail combination of disadvantageous governing planets—while for the regions of Arabia, Azania, and Aethiopia, located in the central part of the northwest quadrant, and thus subject to the influence of the opposing (southeast) triplicity, the rulers are respectively Mars (lord of south-west triplicity), Saturn (lord of north-east triplicity) and Saturn (lord of Aquarius. For Syria, Commagene and Cappadocia (central part of the northeastern quadrant), the sequence of rulership is reversed, and the rulers are Saturn (north-east), Mars (south-west) and Mars (Scorpio). While the dominion of cold, malevolent Saturn renders the subject nations bestial and uncivilized (as noted above, they lead a nomadic life, their diet being based on meat and fish rather than corn, 2.3.50), the inhabitants of Syria and the neighboring lands are described as audacious, irreverent, and quarrelsome—manifestly, the heat of Mars prevails over the cold nature of Saturn, endowing them with the qualities so frequently associated with the planet and its warrior namesake (2.3.41): "The people of Syria, Commagene, and Cappadocia are familiar to Scorpio and Mars; therefore much boldness, knavery, treachery, and laboriousness (*to thrasu kai ponēron kai epibouleutikon kai epiponon*) are found among them" (trans. Robbins).

The last instance of such a double rulership is particularly interesting because of its similarity to the situation of Arabia Felix; the insular region of the Cyclades, Cyprus, and shores of Asia Minor (central part of the northwest quadrant) is ruled by Jupiter (north-west), Venus

(south-east) and Venus (Taurus). As was the case with Jupiter in the case of Hadramaut, the region is dominated by a benefic, in this case Venus: this is reflected in the beauty-oriented *indoles* of the inhabitants:

> And again, part by part, those of this group who live in the Cyclades and on the shores of Asia Minor and Cyprus are more closely familiar to Taurus and Venus. For this reason they are, on the whole, luxurious, clean, and attentive to their bodies (*truphētai eisi kai katharioi kai tou sōmatos epimeleian poioumenoi*) (2.3.20, trans. Robbins).

A careful reader of Ptolemy would be quick to notice that the inclination toward ostentatious display, nearly excessive care for the body, etc. corresponds to the gifts of Venus as outlined in later books of *Apotelesmatica,* which are focused on divining the meaning of the heavenly bodies within a natal horoscope (*thema*)—the planet is frequently associated with *cura corporis*, adornments, cosmetic arts, etc.[40] Its influence is certainly beneficial, yet hardly on par with that of Jupiter—this may correspond to the fact that in the *Apotelesmatica* 1.4.6, where Ptolemy discusses the nature of planets, the emphasis is clearly on the humid, as is the case with the Moon. Belonging to the nocturnal, feminine sect, Venus is characterized by passivity—when combined with the humid element so prominent in its influence, this characteristic is bound to affect the lands subject to its rule. Consequently, Ptolemy focuses on the slightly feminized *indoles* of the Cycladians and Cypriots, a circumstance persuasively illustrating a crucial difference between the dominion of a benefic which is essentially masculine and diurnal (Jupiter) and that exercised by one which is feminine and nocturnal.

Cultural context

Clearly, the astrological situation of Arabia Felix outlined by Ptolemy as regards the dominion of benefics with precedence given to Jupiter would be consistent with its renowned *eudaimonia*—yet, it would hardly account for the manifest uniqueness of the region. After all, the situation where the lord of triplicity is identical with the planet governing the Zodiacal sign with the precise land is not limited to this single example: yet, in all other cases, the *sunoikeiosis* would be with no less than three regions. It seems that the true reason for making Arabia Felix a separate, unique case lies elsewhere, quite possibly in the contemporary assumptions concerning that distant, nearly legendary land. Arabia Eudaimon, located close to the limits of the human world (after all, Aethiopia was generally treated as the southern limit of the *oikoumenē*), has long been perceived as homeland to particularly privileged people.[41] Thus, for example, neither eastern Ethiopians nor the inhabitants of Hadramaut would be considered uncivilized in classical antiquity; Herodotus' passage on the wonders of Aethiopia alone would bear witness to the prevalent opinion of earlier times,[42] with Theophrastus promptly echoing something of his opinion as far as the uniqueness of the land if concerned. It is in this latter's *Historia Plantarum* that we read:

> Frankincense, myrrh, cassia and also cinnamon are found in the Arabian Peninsula about Saba, Hadramyta, Kitabaina and Mamali . . . The whole range, they say belongs to the portion of Sabaeans; for it is under their sway and they are honest in their dealings with one another. Wherefore no-one keeps watch . . . (*HP* 9.4.2 and 5, transl. Hort).

Three points stand out in the descriptions of both writers: abundant riches of the land, the presence of frankincense and spices,[43] and the honesty of its inhabitants. This latter trait appears

somewhat diluted in Strabo's account, where the inhabitants are described as predominantly indolent—still, their indolence is closely associated with the astonishing abundance of goods bestowed by nature:

> Adjoining them is the exceedingly fertile territory of the Sabaians, a large ethnic group, among whom there are myrrh, frankincense, and cinnamon. There is balsam on the coast, and another kind of exceedingly fragrant herb that swiftly loses its odor. There are also fragrant palms, reeds, and snakes, a *spithame* long and red in color that can jump as far as a hare and make an incurable bite. Because of the abundance of fruits, the people are lazy and idle in their lifestyle. Most of the people sleep on the roots of trees that they have cut out. When they are stupefied by the sweet odors they relieve the torpor through asphalt incense and goats' beard (16.4.19; transl. Roller).

Manifestly, for the geographer, the land is full of wonders, both beneficial and harmful to humankind—this striking ambivalence of natural endowment echoes the theories known from the writings of Herodotus, and attests to the persistence of the traditional stereotypes connected to hot climates.[44] At the other social or political end, even though he makes no mention of the alleged honesty of Arabia's inhabitants so prominently present in Theophrastus' account, Strabo emphasizes the unusual combination of monarchic and aristocratic constitutions that is their preferred form of government; according to him, power is inherited by the oldest child born of an aristocratic elite rather than the eldest of royal sons.[45]

Similar images are also present in the historical writings of Diodorus Siculus, who notes in his *Bibliotheca* 3.46.1:

> They inhabit that part of the country known as Arabia the Blest, which produces most of the things which are held dear among us and nurtures flocks and herds of every kind in multitude beyond telling. And a natural sweet odour pervades the entire land because practically all things which exceed in fragrance grow there unceasingly (trans. Oldfather).

Clearly, for the Greek writers, the land holds clear associations with unimaginable abundance as well as exceptional fertility, the presence of spices endowing it with characteristics far exceeding those of any other region: "For a divine thing and beyond the power of words to describe seems the fragrance that greets the nostrils and stirs the senses of everyone" (3.46.6, trans. Oldfather; cf. 3.46.4).

This overabundance is balanced by an extremely large number of natural dangers: the land is rich in venomous snakes and other pests—these were called forth in order to keep the land from attaining an absolute and unmarred state of blessedness, which, if granted, could result in contempt for the divine (3. 47.1). Apart from happiness dependent on the unusual fertility of the land, Diodorus mentions the unique customs governing the behavior of Sabean kings, doomed to spend all their life in the royal palace under threat of stoning (3.47.5), and remarks on the extreme wealth of the inhabitants (3.47. 6–9). Also striking are his observations in 3.47. First, he notes that because of its secluded position, Arabia has been safe from the ravages of war and thus is able to reap the benefits of exceptionally long peace in addition to extreme fertility (47.6). Then, he proceeds to mention yet another interesting feature: "For the fact is that these people have enjoyed their felicity unshaken since ages past because they have been entirely strangers to those whose own covetousness leads them to feel that another man's wealth is their own godsend" (3.47.6; trans. Oldfather).

The important point is not only that the people of Arabia Felix are lucky, but also that they are perceived as lacking the most important motivation for dishonesty, which appears to align with Ptolemy's description. Also, in yet another point bringing us close to the implications of dominion of Jupiter as described in *Apotelesmatica* 2.3, Diodorus notes that the fact that covetousness remains foreign to the inhabitants of the land may be linked to their unsurpassed wealth: "This tribe (*ethnos*) surpasses not only the neighbouring Arabs but also all other men in wealth and in all other of their extravagancies besides" (3.47.5; trans. Oldfather).

Among the Roman authors of the imperial era, Pliny the Elder remarks on the riches produced by the Sabaean land, emphasizing the importance of spice trade,[46] but also stressing the unusual autonomy of the land, which appears to reap all the benefits of *pax Romana*:

> The most wealthy, owing to the fertility of their forest in producing scent, their gold mines, their irrigated agricultural land and their production of honey and wax . . . and then: and strange to say, of these innumerable tribes an equal part are engaged in trade or live by brigandage; taken as a whole, they are the richest race in the world, because their vast wealth from Rome and Parthia accumulates in their hands, as they sell the produce they obtain from the sea or their forests and buy nothing in return (*HN* 6.32.160–62; trans. Robbins).

Manifestly, for Pliny, the Sabaeans are true beneficiaries of the existing world order—effectively, all the wealth of Rome and Parthia flows into their hands, either by honest trade or by acts of piracy (as befits his pro-Roman bias; while conforming to the predominant notion of their wealth, the encyclopedist does not share the high opinion of his probable sources concerning the Sabaeans' honesty). This somewhat ambivalent claim to fame is repeated later in his work, as the author provides an estimate of the yearly income of Arabia Felix, India, and China together: 100 million sesterces from the Roman Empire alone, derived mostly from the spice and pearl trade.[47] The fame of extreme wealth as well as full sustainability of the region, so manifest in the above quoted accounts, might well find its roots in the actual account of one of Pliny's sources, Agatharchides, as it survives in Photius: as the geographer emphasizes the abundance of various goods in the land and blessedness of the inhabitants, he also remarks on the sweet fragrance which greets visitors, filling them with pleasure that can only be described as wondrous (458a–b B.). He also notes that Sabaeans have prospered above any other nation, their land serving as the warehouse of the inhabited world, the principal marketplace of the Ptolemaic empire (459a). It is probably due to their wealth, however, that Alexander himself was thought to hold a distinct interest in the area: "One might even make Alexander a witness to the fortunateness of Arabia, since he intended, as they say, to make it his royal seat after his return from the Indians" (Strabo, 16.4.27; trans. Roller). Incidentally, in Pliny the same Alexander is also rumored to have introduced the use of perfumes into the Greek world;[48] also, a tale reported by Pliny credits him with a particularly interesting (re)discovery of the Arabian coast, namely, it was believed that he had been alerted to its nearby location by the characteristic odor of spices reaching him at sea.[49]

This characterization of the inhabitants of Arabia Felix provided by Ptolemy reflects something of the high regard the ancient sources held for the spice-growing nation: ". . . this accounts for the fertility of the country, in accordance with its name, and its multitudes of spices, and the grace of its inhabitants and their free spirit in daily life, in exchange, and in business" (2.3.32; trans. Robbins).

On the one hand, the character of people—openness and honesty, general good disposition—follows the pattern generally associated with Jupiter. On the other, his portrayal perpetuates the vision of Arabia as a land of unique and inimitable abundance and fertility as well as justice—even Pliny, whose attitude toward the region would best be described as ambivalent (one is reminded of his overall prejudice against the eastern provinces),[50] does mention certain peculiarities in custom and behavior that remain characteristic of the chosen 3,000 families that descend from the original founders of the frankincense trade; apart from certain taboos concerning the tapping time, there definitely are some provisions concerning ownership and allotment of sap collected.[51] Additionally, one notes that Pliny's account of resin-producing plants provides us with yet another peculiarity of Arabian lands: the presence of *enhaemon*, a botanic product credited with blood-coagulating properties: "In Arabia there is also an olive endowed with a sort of tear out of which medicine is made, called in Greek *enhaemon*, because of its remarkable effect in closing the scars of wounds" (12.38.77; trans. Robbins).

By contrast, if we take into account the description of the *gentes* inhabiting the neighboring lands of Arabia, Azania, and Central Ethiopia, we are faced with a notably different attitude, with the author's emphasis put firmly on the bestial character of the respective tribes. The difference could not be more pronounced: for Ptolemy, the lands described under the heading Arabia Felix form a notable exception from the general *indoles* of the respective world region. The link with Jupiter, lord of Sagittarius, stands for their hospitable and friendly attitude, which in turn allows for the development of civilization, where, by contrast, the baleful influence of Saturn explains the barrenness of the land as well as bestiality of the inhabitants of Arabia and Azania (which in turn mirrors the inferior nature of the eastern lands when discussed in 2.3.36).[52] This impression of uniqueness is further emphasized by the fact that the Felix remains alone in participating in the benefits of Jupiter's reinforced rule; this may be understood as highlighting not only its special character in the region, but also its exceptional nature within the *oikoumenē*.

Other examples of attribution

To demonstrate the level of Ptolemy's reliance on the common assumptions of his era as manifest in *Apotelesmatica* 2.3, it seems advisable to consider a few cases beside Arabia. Thus, *exempli gratia*, the territories subjected to the influence of the south-east triplicity Taurus-Virgo-Capricorn extend from India (no mention is made of Indo-China)[53] through the territories of Gedrosia, Parthia, Mesopotamia, Media, to the Arabian Peninsula and Syria Palaestina. Thus, the quadrant (even if we consider only the unadulterated southeast section) displays notable cultural diversification; at least two lands included—India and Parthia—were generally agreed to be culturally advanced, even though their inhabitants were considered to be barbarians.[54] Stressing the religious importance of Mithras and Isis in the quadrant, Ptolemy also notes peculiar sexual customs that are widespread in the territory, such as public intercourse or incest. He also mentions love for elegance, predilection for ornaments, as well as the generous and noble character of the inhabitants, who may, however, display some bellicose propensities (2. 3.23–6).

Still, it may be quite surprising to learn that Parthians (as is also the case with the Medes and Persians), being influenced by Venus (lord of Taurus), are particularly given to luxurious existence (27), and that the territory of India, ruled by Saturn (lord of Capricorn) is inhabited by savage and unclean people (in which it parallels Balouchistan).[55] The latter image, certainly in keeping with the more sinister aspect of Saturn as transmitted in the ancient literature,[56] is consistent with Ptolemy's aforementioned tendency to regard the centrally located lands as

intrinsically privileged, or to perceive the periphery of the known world as uncivilized because it is suffering from a lack of the beneficial, moderated influence of the skies (even if it comes at the cost of disregarding the particular associations of India as the land of sages).

Let us, however, turn our attention to the two other countries associated with the influence of Saturn: Gedrosia and Ariana. The former, comprising vast lands west of the Indus valley above the coast of the Ichthyophagi, in their turn described by Alexander's historians as a most wretched and primitive people,[57] was known to produce myrrh, nard, and other spices; this aspect of fertility was duly accompanied by tales of venomous snakes and the like.[58] Yet, positioned as it is in the torrid zone, it enjoys relatively short periods of rains (monsoons), and indeed, it can prove notably lacking in fruit and water, as described by Strabo, particularly where it borders the inland Ariana (15.2.3–6).[59] Indeed, in his short outline of the Asian territory, the latter author mentions Ariana as a savage and barbaric land inhabited by a variety of entirely uncivilized tribes.[60] In contrast, the description of India seems to be lacking any sort of reference to the multiple *technai* practiced in the land or, even more strikingly, to the renowned wisdom and well-being of its inhabitants, though certainly the land would be considered similar in climate to that of Gedrosia.[61] This stands in stark contrast to the passages in which Ptolemy devotes considerable attention to the study of stars as practiced in Armenia or, naturally enough, Babylonia.

When we come to the description of the lands more or less corresponding to present-day Iran (Parthia, Persia, and Media), we have to realize that Ptolemy faced a considerable challenge in subjecting them to the influence of a single celestial body. First, unlike the inhabitants of, for example, Sauromatica, the people of Persia and Media were well known to the average public, which made a cursory description considerably more difficult.[62] Next, one had to account for both the luxury generally associated with the lands, and for the presence of the Magi, the Zoroastrian priestly caste, whose teachings were, by the second century CE, treasured as a source of true wisdom.[63] Yet, none of this appears in the description, as it is radically narrowed to the mere mention of characteristic long-length attire and love of pleasure.[64] Only when Ptolemy comes to the discussion of Babylonia, Mesopotamia, and Assyria does he mention the scientific studies for which the inhabitants of the provinces became so famous—this is certainly linked to the importance of Mercury within this particular part of the *oikoumenē*. In fact, one may well assume that the summary and superficial character of this description has contributed to the rather dismissive treatment of the whole Ptolemaic *astrologia universalis* in the modern scholarship.[65]

Certainly, the approach is general, but then so it had to be, given the basic premises of the prognostication. Moreover, instead of dismissing the distribution as based on superficialities, it is rather worthwhile to consider it as a mirror reflecting Ptolemy's struggle to keep his systematic theory intact: for example, the absence of even the slightest allusions to the Magi can be seen as not so much a result of superficiality, but rather a natural consequence of the struggle involved in maintaining a rationalizing model of an astrological *oikoumenē*—when discussing Persia, Ptolemy's interest focuses on those characteristics commonly associated with the land which would further his overall schema.

Conclusion

Certainly, when we project Ptolemy's world as appearing in the *Apotelesmatica* onto the celebrated map derived from his *Geography*, the disproportions become striking, and the focus on the Mediterranean becomes even more visible than when we study the astrological treatise alone. This is scarcely accidental; in the long tradition of *astrologia universalis*, the

division of the world would always refer to the world as imagined by the authors, and thus center on the *oikoumenē* known to Greek scholarship. Moreover, if we accept that Dionysius' world map, as it is suggested by Jacob, reflects the widespread beliefs concerning the shape of the inhabited land, the logical conclusion would be that Ptolemy consciously chooses the least controversial as well as the most widely accepted basis for his division. To the Alexandrian, one should award the honor of attempting to give an organized, coherent account of the *sunoikeiosis* doctrine as it was relevant to the world contemporary to him, with the focus on lands close to him. It is because of this that Müller's scandalized assumption that the astrologer purposefully twists the facts to suit himself mistakes the issue: Ptolemy did not need to prove he was at the center of the world, for in his times this was well-accepted truth, supported and further promoted by the manifest preference for the flat world map.[66] Furthermore, even where he needs to prove his case, Ptolemy does not force the facts—he simply chooses the most compatible interpretation. This, among other things, is why his Arabs are uniquely and manifestly *felices*; hence the Felix, featuring in the popular imagination of the time as the land of ultimate blessedness which very nearly exceeds the limits of what is available to mortals, is made astrologically unique in a manner consonant with the usual assumptions concerning that distant and nearly fabled land at the very confines of the *oikoumenē*.

Notes

1 See de Callataÿ 1999/2000. For the link between planetary natures and winds see *Apotelesmatica* 1.11. Characteristically, Ptolemy's distribution of triplets as associated with the world-directions remains unparalleled in contemporary astrological sources—see Bouché-Leclerq 1899, 199–206. The importance of four 'central' winds (those coming from east, west, north, and south) is repeatedly stressed by the ancient geo- and cosmographers (see Wagner 1888, Thompson 1918). It is important to note that Ptolemy's system does not allude to the elemental association of the zodiacal triplicities (i.e. groups of signs divided by 120° and thus linked by trigonal aspect, see *Apotelesm*. 1.19). By contrast, Valens, who does, never connects the winds and the elements, which may possibly indicate that the complete unification of the system occurred after the second century CE, possibly in the Arabic period.

2 The phrase employed is "*proslambanei tēn sunoikeiōsin*." The meaning is certainly ambiguous, for the phrase may imply both that the latter *sunoikeiosis* is the only one and that it is appropriated as something additional; the solution must come through astrological consideration, for the features described with respect to the central regions are not necessarily the same as those associated with the triplicity ruling the opposite quadrant.

3 That the regions in question are subject to simultaneous influence of two triplicities is a condition reflected in their properties: therefore, while the tablets provided by Ptolemy in 2.4 are extremely helpful in eclipse interpretations, it would be a mistake to rely on them when analyzing the author's astrological ethnography or principles of the attribution themselves.

4 See *Apotelesm*. 2.3.49.

5 See Kennedy, this volume.

6 See Salmon 1994, 288–9, Staszak 1995, 182ff., Marcotte 1998. The division of *oikoumenē* in four parts remains a standard element in the majority of ancient cosmographies: certainly, it allows for separation of the three known continents, while the largest of them, Asia, is then subjected to another, horizontal division—the line of this latter could, however, prove controversial. Yet, some differences of opinion may be detected in the ancient tradition: thus, it is well known that Eratosthenes considered India as positioned in the northern rather than southern part of the East, the sentiment shared by his great admirer, Strabon (see *Strabon: Géographie* vol. I 1re partie, introd. par G. Aujac and F. Lasserre, Les Belles Lettres, Paris 1966, 8; see also Strabo *Geographia* 2.1.2–21. On world-division as advocated by Strabo himself, see Aujac 1966, 211–14. Interestingly, as noted by Hübner 1984, 229–30, Rome appears as the center of the universe in Manilius' work, *Astr.* 4.694). The contrary opinion was expressed by the astronomer Hipparchus and it is him that Ptolemy followed both in *Geographia* and in *Apotelesmatica*: quite obviously, he locates India in the southeastern quadrant, associating it with the sign of Capricorn.

7 See Boll 1894, 206, 212. Two testimonies confirming the sling-shape as Posidonius' chosen image of the inhabited world are provided by Agathemerus (*Geographiae informatio* 1.2, Eustathius

Commentarii in Homeri Iliadem 7.446 = F 200 a, b Kidd) and Eusthatius (*Commentarii in Dionysium Periegetam* I = F 201 Kidd). Characteristically, Kidd stresses Posidonius' position as a great authority on geography in the second century CE (Kidd, II (i), 717. Concerning the shape of the *oikoumenē* as it is described in 2.3, see also Feraboli 1985.

8 Compare e.g. *Anon. geogr. comp. GGM* 500.

9 See Aujac 1993, 91–2. He is quick to point out that the world of four mirror zones was proposed by Crates of Pergamum and that the idea was current in Ptolemy's lifetime (on this one may compare also Aujac 1992)—this, according to her, should necessarily lead to the considerable *aporia* concerning the astrological rule over the four *oikoumenai*.

10 The issue becomes more complex once we decide to consider the *Syntaxis*: it is there that Ptolemy defines 'our' (*kath'hēmas*) *oikoumenē* as comprising one fourth of the terrestrial globe (2.1.88 H., antipodes being expressly, though only briefly, mentioned in 6.6.498 H. Symptomatically, however, the latter passage concerns the theoretical problems of mathematical astronomy, referring to the differences between the parallaxes observable in the respective zones of the globe (thus, one should in all likelihood refrain from considering the passage as definitive in establishing Ptolemy's stance with respect to the problem of the actual existence or non-existence of the antipodes).

11 The point was addressed by Bouché-Leclerq 1899, 327. It is, in my opinion, of fundamental importance for the understanding of Ptolemy's exposition to remember that he is dealing with the inhabited world, not the world as such.

12 Nicolet 1988, 88.

13 *Geographia* 2.5.34: "Yet nothing that is outside our inhabited world should be considered by geographers, and even in regard to parts of the inhabited world such kinds of differences need not be learned by those politically knowledgeable, for it would be difficult," and later: "Yet the geographer examines only this, our inhabited world, whose limits are bounded on the south by the parallel of the Cinnamon-Bearer territory and on the north by that through Ierne" (trans. Roller 2014).

14 Given the structure of Ptolemy's system, however, it would be possible to argue that it may be applied to the other *oikoumenai* (should they really exist) as well—in this we would obtain not less than four parallel inhabited worlds. Clearly, this would be a dangerous implication given that it would equate antipodes and others with the inhabitants of 'our' world.

15 See Long 1982, Komorowska 2011.

16 The existent systems of *astrologia mundana*, possibly looking back to the wind-rose of Timosthenes (as argued by de Callataÿ 1999/2000), and exhaustively discussed e.g. in Bouché-Leclerq 1899, 328–47, Pérez-Jiménez 1998, and others, tend to convey a sense of mystery, of authoritative distribution. As an effect, one tends to explain them in terms of cultural, iconographic or even metaphorical associations between the sign and the realms it governs: thus, connection between Egypt and Aries may be explained by invoking the cult of Ammon Ra and the astrological doctrine of world-horoscope, the *thema mundi*: see Komorowska 2004.

17 See *Anthologiae* 2.1.

18 On the subject of these theories as emerging in Manilius, compare Hübner 1984.

19 Additionally, one may note, the four winds doctrine provides a connection with the division of the world employed in *Apotelesmatica* 2.2, thus relating the chief pattern of Ptolemy to the established dogma of the climatic influence on the national *indoles*. Thus, in developing his system around the central core of the climatic influence Ptolemy seeks to base his chorography (description of *oikoumenē*'s diverse lands and their inhabitants) upon the thought pattern already sanctioned by age-old tradition.

20 Emphasized by Gersh in his exhaustive study of later Platonism (Gersh 1986, 227–50).

21 In ancient astrological theory, each planet belongs either to the diurnal, or to the nocturnal sect, the two being respectively governed by the Sun (diurnal, active) and the Moon (nocturnal, passive)—on the issue, see *Apotelesm*. 1.7.

22 Feraboli 1985, 404. The preference for analogy as the most important method employed in the composition of Ptolemy's model is shared, though with radically different results, by E. Calderón-Dorda in his brief overview of the *Apotelesmatica* (Calderón-Dorda 2002).

23 At this point, it seems reasonable to recollect the criticism of Boll, who charged Ptolemy with considerable carelessness in composing his description of the *oikoumenē* (Boll 1894, 202–3). Interesting, the main reason for such a severe judgment was what the scholar viewed as a failure on the part of the Alexandrian to account for all the typical characteristics of certain nations. Thus, instead of sharing his assumption of carelessness, I shall concentrate on what may support my own assumption of a well-thought-over planning that may be detected in the respective chapter.

24 See Bouché-Leclerq 1899, 343–5. The aspect of combination as playing an important role in Ptolemy's geography is stressed by Pérez-Jiménez 1998, 184.

25 This, indeed, has long been a crucial point in much criticism launched against the *Apotelesmatica,* and the tendency survives till today (e.g. in Aujac 1993). There are, however, two problems linked to the issue: first, the *Geographia* is considered to be later than the *Apotelesmatica* (this, however, may be a circular argument); second, there is a vast difference between an attempt to systematize astrological lore and an attempt to systematize the art of map-making, a difference linked to the very nature of the two subjects.

26 Aujac 1993, 102; apart from Casperia, Aujac mentions the single emergence of Oxiana and the riddle involving Orchenia, the otherwise unknown territory that from *Geographia* to *Apotelesmatica* changes its very position. The extensive list of the relevant incompatibilities between the *Apotelesmatica* and *Geographia* appears in Boll 1894, 198–200.

27 Apparently, he remarked on their preference for polygamy: fr. 278b Lasserre = Sextus Emp. *Pyrrh. hypoth.* 1.152.

28 The omission of Pannonia occasions much of Boll's criticism (see Boll 1894).

29 Characteristically, the mention of Bastarnia among lands connected with Aries has often been dismissed as a later interpolation: this leaves us with the question of Leo alone, making the prevalence of the number three all the more manifest.

30 In the introduction to their edition of Ptolemy's *Geography*, Berggren and Jones argue that the discrepancies between this latter work and the *Apotelesmatica* are due to the evolution of Ptolemy's geographical knowledge (Berggren and Jones 2000, 20–22). Thus, they note that in contrast with that of the *Geography*, the world of the earlier work does not extend beyond the Ganges and has Azania placed in quite another location than its regular position south of the equator. While it is certainly probable that his interest in the latter would become more pronounced in the later period, one can well doubt whether he would be entirely unaware of the recent geographical discoveries or of the existence of commercial routes leading far south and east of the Mediterranean. This lends some support to the deprecatory attitude represented by some scholars, who tend to regard the pattern deployed in the *Apotelesmatica* 2.3 as forcing the limits of probability and downplaying the achievements of contemporary geography in order to fit the world-picture into the frames of an already constructed developed theory (thus, Bouché-Leclerq 1899, 336–46; Boll 1894); this, however, overstates the point and does not account for the subtle interplay of the inherited and scientific traditions that Ptolemy strives to reunite in his treatise.

31 See Janni 2009.

32 Mirroring the traditional orientation associated with the Hippocratic school (as manifested in the *Airs, Waters, Places*), the focus diverges from the more precise map orientation in Posidonius or Strabo (see Clarke 1999, 213ff.). Yet, the focus on the Mediterranean mirrors one of the typical features of ancient geography, i.e. its ethnocentrism, as discussed in Romm (1992, 45–9) or Hübner (1984, 229, n. 299). Interestingly, Ptolemy's system of astrological geography, with its stress on the highly developed central part of the *oikoumenē* surrounded by the barbaric and largely uncivilized barbarian nations remains one of the most persuasive and coherent examples of this tendency.

33 The name *Galatia* for Gaul is attested in several ancient sources: see Diodorus 5.24 *passim*, Strabo 4.2.2.

34 Obviously, my interpretation differs from that of Boll, who preferred to understand the term 'Galatia' as comprising Belgica, Aquitania, Lugdunensis, and Narbonensis (1894, 205): consequently Galia is taken as comprising Cisalpina (which opinion I am inclined to share), while 'Keltike' is somewhat doubtfully treated as referring to the western part of Iberia. The division drawn by Diodorus provides further support for the association between Galatia and Aries as he employs the term with reference to the northern part of Gaul (thus, neighboring the region of Germania) and its Atlantic coastline, while the name Celtica refers to the land north of the Pyrenees, but above the Massaliote land (5.32.1). Possible complication to my reading of the text may come from the fact that Cisalpina, located on the Peninsula, remains in close contact with the 'central' and hence 'mixed' part of the world, i.e. Rome. Nevertheless, the Hellenocentric character of the map, manifest in the centrality of the Aegean, may explain this apparent incongruity: on the 'Dionysian' map, Rome (i.e. Latium) is notably closer to the world center than the northern parts of present Italy.

35 Bouché-Leclerq 1899, 345–7; the scholar suggests that the extreme complexity of this system formed insurmountable obstacle in its application by the later astrologers. Concerning Ptolemy's preference for the systematic arrangement, see Aujac 1993, 102–4, where, symptomatically, she speaks of Ptolemy's quest for the order.

36 Ruge (1895, 345) links the triple division of Arabia into the Petraea (land of the Nabateans), the Deserta, and the Felix with Ptolemy himself: before the latter's *Geographia*, the distinction remained somewhat confused, with the land of Arabia Eudaimon occasionally reaching far north into the realm known later as the Deserta (this phenomenon can be observed throughout Strabo's description of the desert regions in his *Geographia* 16). Yet, the description contained in the *Apotelesmatica* seems to point toward the more sophisticated division, with Arabia Felix separated from the remaining land by the line drawn along the territories of the Nabateans, Chaulotai, and Agraii.

37 See Scheck 1995. For detailed analysis, see also Miller 1969, Groom 1981, Dihle 1962, Bowersock 1983, Detienne 1994, 5–36. For the extensive treatment of botanical wonders of the land, see Diodorus 2.49.1–5; 3.46.1–47; 19.94.5.

38 The land comprises the eastern coast of Africa, extending from Opona and Zingis to the southernmost port of Rhapta (see Tomaschek 1895).

39 Located above those of Mars and the Sun, the sphere of Jupiter benefits from the solar heat, but does not share in its destructive character (as is the case with Mars, a planet both dry and hot).

40 Compare, e.g. *Apotelesm*. 4.4.4.

41 For such an understanding of the land, see Thompson 1969, *Apotelesmatica* 2.2; for the consequences of this assumption, see Romm 1992, 49–60.

42 See *Histories* 3.17–18, 25–7.

43 That the spices are the identifying feature of Arabian land is borne out by the observation of Pomponius Mela: "*Arabia dicitur, cognomina Eudaemon, angusta, verum cinnami et turis aliorumque odorum maxime ferax*" 3.8.79.

44 On the issue, see Detienne 1994, 5–59.

45 *Geographia* 16.4, *passim*.

46 The issue of spice occupies prominent positions in accounts of Curtius Rufus (5.1.11) and Pomponius Mela (3.79).

47 Interestingly, the description emphasizes the importance of the pearl trade in the economy of Arabia Felix (12.41.84). One notes, however, that Pliny does not seem overly fond of the land, insinuating (in very moralistic vein) that its alleged 'happiness' is due mostly to the human luxury in death, and thus comes from chthonic gods rather than Olympians (12.41.1).

48 Thus, e.g. Plin. *HN* 13.1.3.

49 Compare Plin. *HN* 12.42.86.

50 On the issue, compare Beagon 1992, 202–4. For the more general treatment of the issue, see Petrocheilos 1974.

51 Pliny mentions prohibitions concerning contacts with women and taboo constituted by funeral rites during the ceremony as well as the controversy concerning ownership of the frankincense groves (*HN* 12.30.54). He also notes an interesting fact concerning the tapping: the harvest is protected by the intrinsic honesty of the harvesters, for no theft is ever attempted (12.32.59). The honesty of Arabians is further highlighted by the contrast it forms against the behavior of Alexandrian spice merchants.

52 One could also introduce a parallel with Strabo (and, quite possibly, Posidonius), where he treats the problem of bestiality of barbarians: the term '*theriodes*' belonged with the standard adjectives employed with reference to the latter and their pre-civilizational stage of life (see Van der Vliet 1984). The contrast is openly acknowledged in Mela 1.61.

53 The region was known to ancient geographers owing to the commerce with the East from either the first or early second century CE (the expedition of Alexandros, mentioned by Ptolemy himself in *Geographia* 1.14; see also Dihle 1964).

54 See Van der Vliet 1984. However, we must remember that India, mainly because of its remoteness, would be also credited with the drawbacks associated with the lands positioned far from the recognized centers of the Mediterranean civilization: see Marcotte 1998 or Romm 1992.

55 Ptolemy's assessment of India may, however, derive from the tradition so manifest in Posidonius (F. 78 J.) and Manilius (*Astr.* 4.724: "*minus India tostas progenerat mediumque facit moderata tenorem*"), who both compare the climate of India to that of Aethiopia. The assumption of a close link between the two was characteristic for a number of ancient sources (see Dihle 1964, 100–101, n. 6) and the bleak view of the southernmost zone could thus possibly influence the view of India as well.

56 See, e.g. Valens *Anthologiae* 1.1.7–16.

57 For the description of Gedrosian Ichthyophagi, see Diodorus 3.15.2; Strabo 15.2.2.

58 Strabo 15.2.3, Arrian *Alex*. 6.22; both accounts devote considerable attention to the botanical and zoological characteristics of the land (Strasburger 1952, 461–2); for the importance of Gedrosia in

the production of spices see also Groom 1981, 115–16. Finally, the traditional association of precious spice and venomous animals is explored by Detienne 1994, 5–36.

59 The account of Strabo, resembling that of Arrianus in his *Anab*. 6.24–6, portrays the Gedrosian desert in colors so dark that they prompted Strasburger's epithet "*das gedrosische Inferno*" (Strasburger 1952, 459).

60 See *Geogr.* 2.5.32.

61 Thus, e.g. by Strabo 2.5.32: ἔθνος μέγιστον τῶν πάντων καὶ εὐδαιμονέστατον.

62 We have to remember that these are the people for whom the name of barbarians was primarily adopted. The situation changed after the expedition of Alexander, but still some customs characteristic to these particular societies would be considered barbaric par excellence.

63 On the presence of Zoroastrian religion and the related pseudo-epigrapha, see Beard and Grenet 1991, 491–556. Several references to the *Magi* are made by Strabo in Book 15.

64 This certainly agrees with the portrayal of the Persian customs as provided by Diodorus 17.77.4–7; 24/35.2.35 and Strabo, 15.3.19–20. Additionally, Diodorus devotes considerable space to the discussion of traditional Persian costume (2.6.6; 5.45.6 *et al.*), and remarks on the incest practices common in the nation: however, in the *Bibliotheca*, those are limited to sibling marriage (10.31.1), while Ptolemy mentions mother-son intercourse (2.3.25), which may possibly derive from the Venus-Saturn rulership.

65 The already mentioned remark of Bouché-Leclerq, who considered all the attribution forced (1899, 345–7) finds parallels in the commentary of Feraboli (1985 *ad loc.*) and, notably, in the longer study of Aujac (1993, 69–106).

66 Müller, 1980, 172; on the preference for the flat image, see Janni 2009.

Bibliography

Aujac, Germaine. 1966. *Strabon et la Science de Son Temps.* Paris: Les Belles Lettres.

——. 1992. "L'Immagine della Terra Nella Scienza Greca." In *Optima Hereditas: Sapienza Giuridica e Conoscenza dell' Ecumene*, edited by G. Aujac, O. Baldacci, and P. Barozzi, 145–221. Milano: Libri Scheiwiller.

——. 1993. *Claude Ptolemée: Astronome, Astrologue, Géographe; Connaissance et Representation du Monde Habité.* Paris: Editions du CTHS.

Beagon, Mary. 1992. *Roman Nature: The Thought of Pliny the Elder*. Oxford: Clarendon Press.

Berggren, J. Lehnart. and Jones, Alexander. 2000. *Ptolemy's* Geography: *An Annotated Translation of the Theoretical Chapters*. Princeton, NJ: Princeton University Press.

Boll, Franz. 1894. *Studien über Claudius Ptolemäus.* Leipzig: Teubner Verlag.

Bouché-Leclercq, Auguste. 1899. *L'Astrologie Grecque.* Paris: Ernest Leroux.

Bowersock, Glenn.W. 1983. *Roman Arabia*. Cambridge, MA and London: Harvard University Press.

Boyce, Mary and F. Grenet. 1991. *A History of Zoastrianism* (Vol. III: *Zoroastrianism under Macedonian and Roman Rule*, with a contribution of R. Beck). Leiden, New York, Køpenhavn and Köln: E.J. Brill.

Calderón-Dorda, Esteban. 2002. "Ptolomeo *Mathematikos Aner*." In *Homo Mathematicus: Astrólogos Griegos y Romanos*, edited by A. Pérez-Jiménez and R. Caballero, 103–22. Universidad de Málaga.

de Callataÿ, Godefroid. 1999/2000. "*Oikoumene Hupouranios*: Réflexions sur l'Origine et le Sens de la Géographie Astrologique." *Geographia Antiqua* 8/9: 25–69. (for another version of this article see Luc Deitz, ed. 2001. *Tempus Edax Rerum: Le Bicentenaire de la Bibliothéque Nationale de Luxembourg (1798–1998)*. Luxembourg: Bibliothéque nationale.).

Clarke, Katherine. 1999. *Between Geography and History: Hellenistic Constructions of the Roman World.* Oxford: Clarendon Press.

Detienne, Marcel. 1994. *The Gardens of Adonis: Spices in Greek Mythology* (transl. J. Lloyd). Princeton, NJ: Princeton University Press.

Dihle, Albrecht. 1962. "Die Fruchtbare Osten." *Rheinisches Museum* 105: 97–110.

——. 1964. "The Conception of India in Hellenistic and Roman Literature." *Proceedings of the Cambridge Philological Society* 190, NS. 10: 15–24.

Feraboli, Simonetta. 1985. *Claudio Tolomeo: Previsioni Astrologiche*, a cura di S. Feraboli. Milano: Fondazione Lorenzo Valla.

Gersh, Stephen. 1986. *Middle Platonism and Neoplatonism*, 2 vols. Notre Dame, IN: University of Notre Dame Press.

Groom, Nigel. 1981. *Frankincense and Myrrh: A Study of the Arabian Incense Trade*. London and New York: Libraire du Liban.

Hort, Sir Arthur, transl. 1916. *Theophrastus: Enquiry into Plants*. London: W. Heinemann
Hübner, Wolfgang. 1984. "Manilius als Astrologe und Dichter." *Aufstieg und Niedergang der Römischen Welt* II 32(1): 126–320.
Janni, Pietro. 2009. "Meglio Piatta Che Sferica: Cosmologia Arcaica e Propaganda Imperiale." *Geographia Antiqua* 18: 107–22.
Jones, W.H.S., transl. 1938–63. *Pliny: Natural History*, London: W. Heinemann.
Komorowska, Joanna. 2004. "Under the Sign of Aries: the Nile, the Zodiac, and a Roman Poet." *Mene* 4: 163–70.
——. 2011. "Scientific Astrology and the Art of Persuasion: Brief Remarks on the Structure of Book Two of the *Tetrabiblos.*" *Eos* 98: 69–85.
Long, Anthony. A. 1982. "Astrology: Arguments Pro and Contra." In *Science and Speculation*, edited by J. Barnes, J. Brunschwig, M. Burnyeat and M. Schofield, 165–92. Cambridge: Cambridge University Press.
Marcotte, Didier. 1998. "La Climatologie d'Ératosthène à Posèidonios: Genèse d'une Science Humaine." In *Sciences Exactes et Sciences Appliquées à Alexandrie* (Mémoires du Centre Jean-Palerne, 16), edited by G. Argaud and J.Y. Guillaimin, 277–324. Saint-Étienne: Centre Jean-Palerne.
Masłowska-Nowak, Ariadna. 1990. *Amazonki: Greckie Źródła Literackie do Historii Mitu* (Archiwum Filologiczne PAN vol. 44). Warszawa: Wydawnictwo Polskiej Akademii Nauk.
Miller, James. I. 1969. *The Spice Trade of the Roman Empire*. Oxford: Oxford Clarendon Press.
Müller, Klaus. E. 1980. *Geschichte der Antiken Ethnographie und Ethnologishen Theorienbildung, von den Anfängen bis auf die Byzantinistischen Historiographen*, Bd. 2. Wiesbaden: Franz Steiner Verlag.
Nicolet, Claude. 1988. *L'Inventaire du Monde. Géographie et Politique aux Origins de l'Empire Romain*. Paris: Fayard.
Oldfather, Charles. H. transl. 1933. *Diodorus of Sicily*, vol. 3. London: W. Heinemann.
Pérez-Jiménez, Aurelio. 1998. "La Imagen Celeste de la Écumene. Geografía Zodiacal y Planetaria." In *Los Límites de la Tierra: El Espacio Geográfico en las Culturas Mediterráneas* (Mediterranea III), edited by A. Pérez-Jiménez , G. Cruz Andreotti, 177–220. Madrid: Ediciones Clasicas.
Petrocheilos, Nikos. 1974. *Roman Attitudes to the Greeks*. Athens: National and Capodistrian University of Athens.
Robbins, Frank. E. transl. 1940. *Ptolemy: Tetrabiblos*. London: W. Heinemann.
Roller, Duane W. 2014. *Geography of Strabo: An English Translation, with Introduction and Notes*. Cambridge: Cambridge University Press.
Romm, James. S. 1992. *The Edges of the Earth in Ancient Thought: Geography, Exploration and Fiction*. Princeton, N.J.: Princeton University Press.
Ruge, W. 1895. "Arabia." *Real-Enzyklopädie für Altertumswissenschaften,* vol. 2, coll. 344–63.
Salmon, Pierre. 1994. "L'Image du Noir dans l'Antiquité Gréco-Romaine." In *Emmigrazione e Immigrazione nel Mondo Antico*, edited by M. Sordi, 283–302. Milano: Pubblicazioni dell' Università Cattolica del Sacro Cuore (Contributi dell'Instituto di storia antica, vol. 20).
Scheck, Frank. R. 1995. *Die Weihrauchstraße von Arabien nach Rom—auf den Spuren Antiken Weltkuturen*. Bergische Gladbach: G. Lübbe Verlag (Polish translation by J. Danecki, Warszawa 1998).
Staszak, Jean-Francois. F. 1995. *Géographie Avant de la Géographie: Le Climat chez Aristote et Hippocrate*. Paris: L'Harmattan.
Strasburger, Hermann. 1952. "Alexanders Zug durch die Gedrosische Wüste." *Hermes* 80: 456–93.
Thompson, D'Arcy. 1918. "The Greek Winds." *Classical Review* 32: 49–56.
Tomaschek, W. 1895. "Azania." *Real-Enzyklopadie für Altertumswissenschaften,* vol. 2, coll. 2639–42.
Van der Vliet, E.C.L. 1984. "L'Ethnographie de Strabon: Ideologie ou Tradition?" In *Strabone: Contribute allo Studio della Personalità e dell' Opera*, edited by F. Prontera, 29–86. Perugia: Università degli Studi.
Wagner, Emil. A. 1888. *Die Erdbeschreibung des Timosthenes von Rhodus*. Leipzig: Teubner Verlag.

21
‘UGLY AS SIN’
Monsters and barbarians in Late Antiquity

Maja Kominko

The arrival of Christianity did not cause major upheavals to the classical conception of physical geography.[1] It did, nevertheless, necessitate revisions to ethnography. A professed universalism of the new religion eroded the cornerstone of classical ethnography, the contrast between the civilized society and the wild, uncivilized barbarian.[2] Moreover, Christian belief in the unity of a human race, originating from Adam and redeemed by Christ, meant that the existence of the most peripheral peoples, often presented in antiquity as monstrous, posed a problem.[3] Christian authors made efforts to bring the heritage of classical ethnography in line with the authority of the Bible. Nevertheless, in discussing alien races, both human and monstrous, they continued to employ classical rhetoric, and interpret any departure from the norm of physical appearance as morally suspicious. In what follows, I briefly trace themes from classical ethnography as they were transformed and reused by Christian authors. I focus in particular on the continuity of rhetorical tools employed to designate and denigrate the ‘other’ barbarian: monstrous, pagan, and even demonic.

The term ‘barbarian,’ originally designating somebody who did not speak Greek, ingeniously transformed all diverse non-Greeks and non-Romans into one ‘collectivity’ that embodied everything that Greeks and Romans were not.[4] This is not to say that barbarians were merely un-Greek and un-Roman. There was a great diversity in ways they were described, but inversion was a significant component of representation and, overall, along sensitive, varied, and informed descriptions, set types were employed and reused.[5] Accounts of exotic nations often served an important rhetorical role in authors’ presentation of their own society, not only in terms of the contrast between the civilized and uncivilized, but also one between the civilized society and a noble savage, epitomizing the ideal of moral purity and spiritual fortitude, a state of innocence lost in the civilized world.[6] Consequently, a contradictory image of barbarians emerged, combining visions of inferiority and utopia. On occasion, even descriptions of one group could be conflicting.[7] Overall, however, barbarians described throughout antiquity differ much less than we could expect. Later authors often followed the convention of portraying the barbarian tribes of their time under anachronistic names drawn from Herodotus.[8] Descriptions of alien peoples were frequently based on the same set of the basic criteria, such as strange appearance, odd diet, or irregular sexual activity.[9] These barbarian qualities were amplified in the accounts of Roman conquest, in keeping with the presentation of this process as the civilizing mission of Rome.[10]

The general stereotyping of barbarians by physical strength combined with moral and intellectual weakness often cast them as less human than Greeks or Romans.[11] The fact that they spoke incomprehensible languages reinforced this notion, since speech was seen as one of the defining human attributes.[12] Barbarians were denigrated as 'beasts' or 'monsters,'[13] and because barbarity intensified in proportion to the distance from Greek and Roman centers, the most distant peoples were often pictured as literally semi-monstrous and only borderline human.[14]

The tradition of monstrous races inhabiting far-flung regions of the *oikoumenē*, mentioned by Hesiod and Herodotus, was enriched as it was transmitted from Scylax of Caryanda, Ctesias of Cnidus, Megasthenes, stories of Alexander's exploits in India, Pliny, Pomponius Mela, and Solinus.[15] India was particularly prone to harbor fantastic races such as Cynocephali, Sciapodes, Monophthalmoi (one-eyed), and many others.[16] Skeptics dismissed these accounts as fantasies, produced by authors seeking novelty.[17] Others thought that monstrous races were in fact animals which only superficially resembled humans, or that accounts of these races were based on real qualities of human tribes, distorted through literary licence. [18,19] Finally, the authors who admitted the possibility that these hybrid human creatures existed usually attributed their origins to the effect of climate, which was believed to have a great influence on physical and mental formation and which was thought to be extreme in peripheral regions of the *oikoumenē*.[20] The composite beings were sometimes seen as jests of nature, *ludibria naturae*, or as nature's mistakes.[21] Although the same terms are used to describe both monstrous races and monstrous individual births, it is somewhat difficult to gauge if the processes that cause them to occur are believed to be similar. Indeed, most ethnographic writers had little interest in explaining the origins of the monstrous races.[22]

More than in the origins of monsters, ancient *paradoxography* (collections of wonders) was interested in the potential for the moral interpretation of their appearance.[23] The notion that the external form is expressive of the moral nature was solidified and perpetuated by physiognomics, which sought to detect from outer features of individuals their character and destiny.[24] The body was believed to be in harmony with the soul and physical peculiarities were thought to express the moral and intellectual characteristics of individuals and races.[25] Deformed or ugly could on occasion be demonized.[26] The barbarian's physical qualities, were frequently seen as an expression of an equally barbarian spirit: "Hair covering the upper forehead running back towards the head bespeaks and impetuous and imprudent spirit, for it recalls barbarian peoples."[27] A fundamental assumption was that harmonious features reflected a harmonious mind, and on that view the monstrous races seemed suspicious.[28] We should also note that one of the basic tools used in physiognomics were animal comparisons. Similarities between physical features of a person and an animal served as a basis for inferring a resemblance between that person's character and the nature of the animal.[29] These types of readings were on occasions applied directly to human-beast hybrids, but not consistently, possibly because of the uncertainty of their human status.[30]

The rise of Christianity undermined physiognomics, but did not lead to its dismissal.[31] Its continuous use is attested to in the works of Clement of Alexandria, Origen and others.[32] Nevertheless, the animal comparisons became unacceptable: because man was created in the image of God, comparing his form with that of an animal was blasphemous.

In professing universalism and a unity of a human race,[33] Christianity challenged not only the division between the civilized and the barbarian, inherited from the Greek and Roman ethnographers, but also the contrast between the 'chosen' people and their ethnic 'others,' inherited from the Old Testament.[34] The new faith proclaimed that all people were descendants

from Adam and what made them part of the Christian community was their belief, not culture, ethnic, or social origins.[35] Thus the division of humanity based on ethnicity was often replaced with one based on faith.[36] Church fathers, who were not oblivious to the value of alien, threatening types in helping to consolidate the internal strength of the community, assimilated rhetoric of classical ethnography, then adjusted, enriched, and adapted it to discussion of new 'others': pagans, Jews, heretics, and even demons.[37] An emphasis on the dangerous 'other' runs through the writings of apologists such as Augustine and Theodoret of Cyrrhus, and heresiologists such as Epiphanius of Salamis, who lump together heretics, Jews, and polytheists as demonically inspired enemies of Christianity.[38]

Despite the insistence on the unity of human race, in parallel with the spiritual 'other,' Christian authors continued to perpetuate the notion of the ethnic, barbarian 'other', often employing classical names of barbarian tribes to designate new groups.[39] The effort to bring the ethnographic tradition in line with the Bible is visible in genealogies, for example the Isaurians, known in Late Antiquity as cruel brigands and likened to Homer's Laestrygonians, were sometimes presented as descendants of Esau, a biblical wild man.[40] Barbarians perceived as especially dangerous, such as Scythians and later Goths, were identified with Gog and Magog, the quintessential Biblical "others", presented by Ezekiel 38–9 and Revelation 20:8 as eschatological foes of humanity.[41] Christian writers often explicitly refer to this tradition, which allows them to present these nations as quasi-diabolical. A good example is Jerome, who writes: "Scythians beyond Caucasus are descendants of Gog. After having reigned for a thousand years, they will be stirred up by the devil, gather many peoples and come to Palestine in order to fight against the Saints."[42]

The symbolic power of Gog and Magog as the enemies of God was such that they were integrated into the *Alexander Romance* as a part of an effort to transform Alexander into a proto-Christian ruler, who protected the peoples of the earth by enclosing the unclean nations beyond the barrier in the north.[43] Importantly, Gog and Magog were also seen as monstrous races, which allowed Christian authors to connect the accounts of ancient ethnography with the biblical narrative.

The accounts of monstrous races inherited from classical lore continued to fascinate. Narratives by Pliny the Elder and Solinus were discussed by Augustine, included into the encyclopedic work of Isidore, copied and repeated with only minor divergences in encyclopedias, cosmographies, and natural histories of the following centuries.[44] India and Ethiopia persisted as places of marvels, but fantastic races were also on occasion placed in areas of northern Europe.[45] Indeed, their fearsome appearance was occasionally enhanced; for example, Cynocephali are described as having manes of horses, tusks of wild boar, and an ability to spit fire.[46]

Yes, the existence of these races posed a problem. Christians believed that all people, no matter how uncivilized or malformed, were descendants of Adam, through the sons of Noah. As such, they were redeemed by Christ and should be baptized.[47] It was therefore important to understand if monstrous races were human.[48] Augustine considers this issue in a long section in the *De Civitate Dei*, where he explores three possible answers: the first and easiest solution was that the monstrous races did not exist. Second, that they did exist, but were not human. Discussing this possibility, Augustine points out that had it not been commonly known that apes and monkeys were not human, the natural historians who take pride in curious lore would try to "foist them upon us as diverse distinct tribes of men."[49] He takes a particular issue with the Cynocephali "whose dog's head and actual barking prove them to be animals rather than men," a description that echoes the notion that speech is an essential human quality. Overall, however, Augustine defines a human being as

"a rational, mortal animal" without referring to speech, and notes that unusual appearance, different color, sound, or any other such peculiarity should not make us blind to qualities shared by all humankind.[50] Accordingly, if the monstrous races did exist and if they were human, they must be descendants of Adam through Noah and his sons and as such they should be baptized.[51] Augustine was prepared to accept the existence of monstrous races who, though unusual, did not disrupt the unity of the human race. At the same time, he firmly rejected the possibility of human inhabitants in the Antipodes. Separated by the Torrid Zone, believed in antiquity to be impossible to cross, the Antipodes were not accessible at any point of history. Consequently, if there were any inhabitants of the Antipodes, they could not descend from Adam through the sons of Noah and therefore, they were not redeemed by Christ. To avoid this theological conundrum, Augustine decisively dismisses the idea that humans lived there at all.[52] His discussion illustrates the theological rationale underlying the need to maintain the unity of Christian race, for all the diversity of individual tribes.

If the fantastic races existed, and if they descended from Adam, the cause at the root of their monstrous appearance was problematic. Augustine believed that the same reasons that could explain the monstrous births of individuals could explain the monstrous races. He was adamant that neither class is Creator's nor nature's mistake, as such a view was impossible to accept for Christians.[53] Christian authors inherited the notion that people differed depending on the region they inhabited.[54] It seems, however, that they were often keen on interpreting the abnormal appearance of the monstrous races as a sort of moral lesson in line with the etymology of the Latin term '*monstrum*,' extensively exploited by writers like Augustine and later Isidore.[55] Importantly, Augustine suggests that the *monstra* have a special purpose and that they remind humanity about its pitiful post-lapsarian state.[56] Indeed it has been sometimes argued that the Christian accounts of monsters differ from their pagan sources in that they focus on the symbolic significance of the monsters.[57]

Rather than merely manifesting the variety of the creation, the monstrous races were often seen as cursed and degenerate, a warning to other men against pride and disobedience.[58] In an effort to find a biblical explanation of the monstrous races, some authors saw them as descendants of Cain.[59] Another hypothesis was that they were descendant of the angels of God, seduced by the daughters of men who subsequently bore a race of giants (Genesis 6.2).[60] Finally, the monstrous races were also identified with Gog and Magog.[61] Sometimes these traditions were combined and the monstrous races of Gog and Magog were also seen as descendants of Cain, as for example on the Hereford Mappaemundi.[62]

Yet another approach saw these beings as creatures that were mistaken for gods and worshipped by pagans. According to St. Anthony's biography, the saint spent all his adult life in the wilderness where he often had to confront demons. On one occasion, however, he was confronted by a mortal semi-human creature, that is, human in the upper part of the body, but with legs and feet like those of an ass. Although accompanied by demons, the satyr-like being seemed more playful than dangerous, tugging on the string used by the saint for weaving. When Anthony made a sign of the cross, the creature fled so quickly that it fell and died.[63] The appearance of this being, its trickster-like character, and the location of this encounter in the eastern desert, suggest that he was the god Min, whom Egyptians identified with Pan and considered "the lord of the eastern desert."[64] Anthony's encounter with a very similar creature in Jerome's *Vita Pauli* has a rather different outcome. On his long way to Paul, Anthony meets two strange inhabitants of the desert: a hippocentaur and a satyr. The first does not speak and is only able to bark incomprehensibly before directing Anthony on his way.[65] The satyr is more articulate; he identifies himself as a member of a desert tribe erroneously worshipped by pagans as fauns, satyrs, and evil spirits. He acts as an envoy and

requests Anthony's prayer on his peoples' behalf.[66] This encounter creates a sharp contrast between the error of the pagans who worship the creatures of the desert, and the creatures themselves who can embrace the truth of the Christian religion.[67] Further, Jerome compares the piety of these desert-dwellers with the sins of the Alexandrians. The juxtaposition is particularly effective because satyrs, described here as pious Christians, were seen in classical mythology as sexually insatiable, disorderly, and savage drunkards.[68] Jerome's description is a twist on the *topos* of the noble savage, employed by ancient authors to offset the moral failings of the civilized society: his savages are ennobled by the power of Christian faith.[69] It is also interesting to note that to reinforce the reality of his story, Jerome adds that when Constantine was on the throne a similar creature, a satyr, was brought to Alexandria and shown as a marvelous sight to people. When the creature died, his body was preserved in salt and brought to Antioch so that the emperor might see it.[70] This short digression resembles a side story in the *Alexander Romance*, where Alexander captures fantastic peoples as specimens.[71]

Jerome's account shows the potential of piety and devotion that the monstrous races could be capable of. Importantly, if they were human, an effort had to be made to incorporate them into the Christian Church.[72] Because they were often placed in the furthest regions of the *oikoumenē,* they could be conveniently transformed into a symbol of the all-encompassing mission of evangelization.[73] Christians were happy to appropriate the triumphalist ideology of the Romans in order to demonstrate the degree to which Christianity embraced *orbis terrarum* from India in the East, to Spain in the West.[74] In emphasizing the mission of Frumentius to the kingdoms of the Red Sea, the apocryphal apostolic conversions of Parthia and India, missionary activity in Iberia, and evangelism across the Rhine and the Danube, Christian authors celebrated the success of Christianity beyond the boundaries of empire.[75] The conversion of regions long associated with the boundaries of the *oikoumenē* is often given significant emphasis and on occasion this point is reinforced through stories of the missionary encounters with monstrous races. In particular, Cynocephali frequently appear as a symbol of the universal reach of Christianity. Represented in medieval depictions of Pentecost, they also feature in stories of conversion.[76]

Probably best known of these is an encounter with a Cynocephalus during the mission of Sts. Andrew and Bartholomew to the cannibals in Parthia, for which the earliest source is the fragmentary fifth- or sixth-century Coptic *Acts of Bartholomew*, reconstructed on the basis of Greek sources.[77] The story is included in the fourteenth-century *Contendings of the Apostles (Maṣḥafa gadla hawâryât*), an Ethiopian compilation based on earlier Greek, Coptic, and Syriac material.[78] When the cannibal cynocephalus first appears in the story, he is engaged in a discussion with an angel, during which the dog-headed creature declares that he would like to learn about God. Nevertheless, he initially rejects the angel's invitation to approach the apostles, explaining that he does not look like a man, he does not speak the language of men, and he fears that he might eat the apostles if he is hungry—a description that seems to echo several of the basic markers of a later alienation from classical ethnography. The angel replies with the promise that God will give him the nature of a man. This promise is fulfilled when, at the sign of the cross, the cynocephalus loses his beastly nature and becomes gentle, though there are no physical changes to his appearance. Indeed, he is described as being exceedingly terrifying: four cubits high, with the face of a large dog and with eyes like lamps of fire, back teeth like the tusks of a boar, front teeth like the teeth of a lion, and his finger- and toenails like claws. It may be interesting to note that when he first approaches the apostles, they take him to be an unclean spirit.[79] In the end, in an epitome of a successful apostolic mission, the cannibal not only

converts, but also eventually becomes a saint under the name Christopher.[80] Docile and kind, he is nevertheless able to return to his fearsome nature when the protection of the Apostles requires it.[81] With the help of prayers, he always returns to his new human self.[82] A similar motive of faith overcoming one's beastly nature was transferred from the story of Christopher into the narrative of an Egyptian saint, St. Mercurios or Abu Sefein.[83] In this story, the Cynocephali appear as the saint's helpers. Converted by Mercurios' father, they are docile, but whenever the need of a battle against pagans requires it, they return to their wild state.[84]

In both stories, faith allows the Cynocephali to become human—not externally, but morally and spiritually.[85] The notion that the conversion works as an exorcism which banishes the beastly nature of the cynocephalus may be inspired by the rite of exorcism in Christian baptism, aimed at purging any demons that hold the soul under their influence.[86] Though it would be presumptuous to suggest a direct link, the stories echo an interpretation put forward by Augustine and Isidore, who saw monsters as a lesson and a reminder of the condition of humanity after the fall. In conversion stories, the grace of faith allows the faithful to overcome spiritual baseness and alleviates the effects of the original sin. The external ugliness, though described with gusto, is seen as far less important than spiritual failings.

Nevertheless, associations between physical ugliness and moral degeneracy continued to be exploited in Christian texts.[87] The demons, although described as immaterial, are invariably ugly when they manifest in their true form.[88] Nevertheless, attitudes toward ugliness, but even more so to beauty, are ambivalent: physical appearance could reflect the beauty of the soul or, on the contrary, it could deceptively cover spiritual ugliness.[89] In many cases, the existence of composite beings is dismissed, but their monstrosity is perceived as an echo or a portrayal of the spiritual monstrosity of sinners, pagans or unbelievers.[90] In one of the stories in the *Life of St. Andrew the Fool*, the saint, who examines reliefs of the battle of gods against giants with serpentine legs, is aggressively accosted by a passer-by. The saint answered back: "You fool in your spirit! I am looking at the visible idols, but you are a spiritual serpent-legged being, and a serpent, and of the viper's brood, for your soul's axles and your heart's spiritual legs are crooked and going to Hades."[91]

The Byzantine interest in monstrous races is illustrated by the extensive quotation of Ctesias' *Indica* by Photius and Scylax of Caryanda by Tzetzes.[92] Though Byzantine authors insist that the hybrid creatures are fabrication of the ancient writers, they are happy to exploit their metaphorical potential.[93] This did not mean that they could not have been used for metaphorical potential. For example, in the eleventh century, Psellos in an allegorical treatise on the sphinx explains that the sphinx represents man, who is composed of both rational and irrational natures.[94] A degree of familiarity with the hybrid races is also confirmed by Byzantine representations, even if they are rare and far between.[95] Because they appear in very diverse contexts, it is difficult, if at all possible, to draw any general conclusions. Yet, there is one intriguing aspect of iconography which recurrs in several representations of Cynocephali which might give an insight to the Byzantine attitude to these creatures. In the ninth-century Chludov Psalter on fol. 19v, an illustration to *Psalm* 21.16, "Because many dogs encircled me, a gathering of evildoers surrounded me," shows Christ surrounded by Cynocephali. A closer inspection reveals, however, that these are people wearing dog's masks.[96] In a fourteenth-century illuminated manuscript of the *Alexander Romance* (Venice Hellenic Institute Codex Gr. 5, fol. 107), the Cynocephali are represented with their dogs' heads growing from the backs of their human heads.[97] In both cases, they retain their human aspect. One wonders if such a

choice of representation was not, at least in part, to emphasize their human nature. In the context of the Psalter illustration, it seems that the representation may also be designed to indicate that the inhuman element should not be understood literally. There, as in the *Life of St. Andrew the Fool* quoted above, the beastliness is spiritual not physical, in keeping with the exegesis of this passage by St. Paul and by the Church Fathers.[98] Unlike medieval western authors, who continued to present the monstrous races as the real inhabitants of far-flung places, the Byzantines appear to deploy their monstrosity—in text as well as in images—as metaphors of spiritual shortcomings.[99]

Notes

1 Kominko 2013, 52–61.
2 The term "*barbarophonos*" is employed by Homer (*Il.* 2.867–8) and Herodotus (8.20; 9.43). For broader discussion on the idea of the 'barbarian other' in the European imagination, see Rawson 2001.
3 See especially Romm 1992.
4 Hall 1989, 4–15. Symptomatically, the word became more common after the Persian invasion, when the Greek collective identity was reinforced. See Geary 1999, 107; Heather 1999. For an opposing viewpoint, see Kim 2013. The construction of barbarian was not only ethnic. For example, in Strabo, the antithesis between Greeks and barbarians is usually based on ethnicity (e.g. 1.1.17, 6.1.2, 6.1.10, 6.3.2–3, 7.71, 9.2.3, 9.4.16, 14.5.23, 15.3.23) but occasionally barbarian status is described as independent on origin, and possible to change under the civilizing influence of Greeks and Romans (4.1.12, 13.1.58). See also Almagor 2005, 42–55.
5 Extensive discussion of this issue in Woolf 2011 and Veyne 1993.
6 Ethiopians, as described by Homer, (*Il.* 1.424–5, 23.192–211), or one-eyed Arimaspians described by Herodotus (3.23). See Romm, 1992, 49–60 and 69–74. See also Horace *Odes* 3.24 or Dio Chrys. *Or.* 36 on simple lives of Scythians. Similar discussions provided implicit moral commentary on the writer's own society. A good example is Tacitus' *Germania* 5, 16, and 18–19, which contrasts the Germani's lack of interest in gold with the avarice of the Romans and their monogamy with licentiousness of the Romans. See also Merrils 2004, 225–6. Strabo (7.3.7) goes as far as to suggest that Greeks are to blame for moral decay of the peoples around them.
7 Ephoros pointed out that while some Greek authors described the Scythians as cannibals, others saw them as a race opposed to all taking of life who, therefore, subsisted exclusively on milk. See Strabo 7.3.9 = Ephoros fr. 42.
8 Woolf 2011, 16; Hartog 1988, 213–59; Wiedemann 1986, 189–211; Shaw 1982/3.
9 On the barbarian appearance, see, for example Ammianus Marcellinus 15.12.1. A good example of an unusual diet are Astomi, apple-sniffers, who obtained nourishment by sniffing sweet scents, such as wild apples (Plin. *HN* 7.25). On cannibalistic barbarians, see Hdt. 3.25.6, Thuc. 2.70.1, Polyb. 1.85.1, Strabo 4.5.4, Caes. *B Gall.* 7.77.12, Ammianus 21.22. See also McGowan 1994, Woolf 2011, 32–3. For the discussion of irregular and immoral sexual activity of barbarians, see Hdt. 1.203, 3.101, Plin. *HN* 2.30. Teubner numbering is used for Pliny throughout.
10 The more beastly the barbarian, the greater the triumph of the conqueror. See, e.g. descriptions of cannibalism in Caes. *B Gall.* 7.77.12. See also Riggsby 2006, 47–50.
11 Aristotle (*Eth. Nic.* 1149a10) asserts that a bestial temperament is a characteristic feature of barbarians. Similarly Lib. *Or.* 15.25.
12 See, e.g. Ael. *NA,* 4. 46. Romm 1992, 79; Dierauer 1977, 12, 33–4; Sorabji 1993, 78–96.
13 SHA *Max.*17, Zos. 2.47.5; Julian *Or.* 1.38 C; 2.62 C; Synesius *De Regno* 6.1.69; Sid. Apoll. *Epist.* 1.7.6, 2.1.2, 5.5.3. See Wiedemann 1998, 189–201. In particular, the literature of the Roman elites of the fourth and fifth centuries is filled with such vituperative images. See, e.g.: *sed tantum distant Romana et Barbara, quantum quadrupes abiuncta est bipedi vel muta loquenti* ("Yet what is Roman and what is barbarian are as different from each other as the four-footed creature is distinct from the two-footed or the dumb from the speaking," Prudent. *C. Symm.* 2.816–17). See Salzman 2006, 352; Chauvot 1998, 46–7, 87–100.
14 The potential of the far-flung regions to harbor the fantastic has already been noted by Eratosthenes, who remarked that Homer removed the wanderings of Odysseus into the edges of the *oikoumenē*, because these regions were "easy to lie about" (Strabo 1.2.19).

15 Hesiodic *Periodos Ges* fr. 150 = Strabo 7.3.6; Hdt. 4.191; Scylax of Caryanda = Tzetz. *Chil.* 7.629–36; Ctesias, Indica = Phot. *Bibl.* cod. 72. 45a20–50a4; Plin. *HN* 7.21–32; Solin. 17.55, 30.4; Pompon. 3.61–6. See also Romm 1992, 82–120; Wittkower 1942, 159–97; Evans 1999; Stoneman 2008, 67–90.

16 In addition to authors in the note above, the Kunokephaloi appear also in Philostr. *V A* 6.1. See also Lecouteux 1981; Karttunen 1984; White 1991, 47–55. For sciapodes, see Philostr. *V A* 6.23–5, a passage quoted by Euseb. *Against Hierocles* 21. See also Garland, this volume.

17 Strabo criticized "those who write Indian stories (*ta Indika*)" because "they include fables (*mythoi*) in their work, not through ignorance of how things really are, but through an intentional fashioning of impossible facts for the sake of wonder (*terateia*) and pleasure" (1.2.35). Most of the authors who dismissed these accounts felt compelled to describe what they condemned, effectively perpetuating the notions of the existence of the fabled races (Strabo 2.1.9, 8.3.6; Lucian *Ver. hist.* 1.3; Gell. *NA* 9.4.13–14, 10.12.1–6). On the other hand, some expressed caution in dismissing these accounts; Pliny notes that it would be difficult to believe in Ethiopians before actually seeing them (*HN* 7.6). An unusually scientific approach to this subject and dismissal of monsters on scientific grounds can be found in Galen's *Usu Partium* 3.1–3, where the author rejects the existence of centaurs on the grounds of the "insuperable digestive and generative incompatibilities between horse and human."

18 Beginning with Pl. *Tht.* 161c, Kunokephaloi were often identified with baboons, see, e.g. Ael. *NA* 10.30. The same author, however, writes that under Ptolemies the Egyptians taught Kunokephaloi to read and play musical instruments (Ael. *NA* 4.10). Pliny defines the satyrs in eastern India as animal, only superficially resembling human beings (*HN* 5.46). Similarly, Martianus Capella, who places Satyrs in Africa, also sees them as animals (6.673–4). Curiously, elsewhere, he describes them as playing musical instruments and dancing to the light of torches (6.667). See also Secord, this volume, for other examples of animals being trained to assimilate into new environments.

19 Strabo, who made Homer's epics the foundation of his geography, argued that the tale of the Cyclops had a factual basis in the antisocial behavior of a tribe in Sicily (1.1.9–10).

20 Those who lived in very cold or very hot regions were thought bestial in manners and in appearance, as excess distorted both the body and the mind (Hippoc. *Aer.* 13.15–21, 19.22, 20, 24; Ps.-Arist. [*Pr.*] 909a13, 909b15, 910a30; Plin. *HN* 2.189–90; Ptol. *Tetr.* 2.2; Morgan 1984, 269–70). Diodorus Siculus attributed to these regions existence of creatures "in which parts of animals which differ widely by nature are combined," and attributed it to the sun's generative force (2.51.2–4). Similarly, Pliny wrote that monstrous forms of animals and men arise in extreme reaches of Africa because of molding power of fiery motility in shaping their bodies (*HN* 6.187). See also Benabou 1975, 149; Louis 1994, 88–9.

21 Aristotle has an ingenious explanation for the large number of diverse creatures and hybrids in the desert: they are the result of beasts mingling around waterholes (*Hist. an.* 606 b15–20), but such cross-racial breeding is only possible in the hot climates of Asia and Africa (*Gen. an.* 746a29). See also Garland 2010, 34–50.

22 Aristotle repeatedly opposes the organism that is "*kata physin* (in accordance with nature)" to that which is produced "*teratodos* (monstrously)" (*Hist. An.* 496 b 18; *Gen. an.* 769b30). Fundamentally, for Aristotle, a monster does not resemble the normative parental form (*Gen. an.* 770b5). See also Morgan 1984, 27–30.

23 Barton 1994, 123–4.

24 See Barton, 1994, 95, and Goldman, this volume. The aim of physiognomics, as defined in a fourth-century BCE treatise was "to examine and recognize the character of the personality from the character of the body" (Ps.-Arist. [*Phgn.*] 806a. According to Aristotle's *Analytica priora* 705b5, "It is possible to judge men's character from their physical appearance, if one grants that body and soul change together in all natural affections." See Boys-Stones 2007.

25 Among the best known are a third-century BCE document, *Physiognomonica*, attributed (inaccurately) to Aristotle; *On Physiognomy*, a work by the second-century CE rhetorician Polemo of Laodicea; two later documents from the fourth century CE, *Physiognomonica* by Adamantius the sophist; and an anonymous Latin handbook, *de Physiognomonia*. These texts were collected and published by Förster in *Scriptores Physiognomonici Graeci et Latini*. See also Goldman, this volume.

26 After an outbreak of a plague in Ephesus, Apollonius exposes a misshapen old beggar as the demon of plague, Philostr. *V A* 4.10. In times of natural disasters, an ugly, deformed victim known as *pharmakos* or "scapegoat" could be selected, upon whom the blame for the current events was laid and underwent ritual expulsion. A description by the twelfth-century Tzetzes, is bases on the poems of Hipponax, who lived in Colophon in the sixth century BCE: Tzetz. *Chil.* 5.728–45.

27 *De physiognomonia* sec 14 = F.2.23.

28 "Since the ill-proportioned are villainous rogues, those with balanced proportions will be just and brave," Ps.-Arist. [*Pr.*] 814a1. "There are also legends which imagine and create from different bodies hydras, chimaeras and giants to make known the diversity of evil," anon sec. 44 = F.2.62. See also Morgan 1984, 276.

29 Evans, 1969, 150; Dagron, 1987, 69–74; Barton, 1994, 124. *Scriptores pysiognomici* I.190.12–14, 170.24–172.2. In addition to the general remarks on the zoological method, we have a list of the characters of 94 animal species (*Scriptores physiognomici* I.172.5–190.3). It may be useful to remember that according to Aristotle, monstrous births occurred when the animal substrate was stronger than the human one: *Gen. an.* 769b20–22.

30 In the case of satyrs or centaurs the equalities assigned to them by physiognomics—unbridled animal instinct, propensity for drink, sex and violence—were consonant with those attributed to them in myths and authors from Homer onwards (*Od.* 21.295, *Il.* 1.262; Plut. *Thes.* 30, Diod. Sic. 4.70; Hyg. *Fab.* 31.33; Ael. *NA* 12.1). In the case of Kunokephaloi, none of the wealth of lore about the natures of those whose faces are dog-like appears in ethnographic writing; see Morgan 1984, 275; Lecouteux 1981.

31 Physiognomics were often seen as too close to astrology to be acceptable: Hippol. *Haer.* 4.15.

32 Clem. Al. *Strom.* 1.21.135; Origen, *C. Cels.* 1.33.40; Tert. *De Cultu Feminarum* 2.1, 8.13; Gregory of Nyssa, *Funerary Oration* 7.5, 8.10, 18.5. See also Evans 1969, 159.

33 For an extensive discussion, see Buell 2002.

34 The ethnicity as the identity marker in antiquity has been challenged by scholars who saw cultural, legal, and political status as more significant. See McCoskey 2003, 93–109. The ethnic divisions are fundamental in the biblical narrative, which focuses on survival of a small nation, in a world of dangerous 'others': Egyptians, Philistines, Amalekites, etc. See Millar 2005, 87; Gottwald 2007. The Septuagint appropriated the term "barbarian" (Psalm 113:2, Maccabees 4:25 and 10:4). The Bible also designates foreigners as "different language speakers" (Ezekiel 3:5–6; Isaiah 33:4–19), an opposition undermined by the Pauline First Epistle to Corinthians 14:11 and by Acts 2:1–6. On the linguistic division of peoples successfully overcome by the linguistic charisma of the Apostles, see, e.g. John Chrysostom, *Contra Judaeos* 5.7 PG 48 col. 822.

35 Colossians 3:11, Galatians 3:27–9. In the fourth century, Diodoros of Tarsos opposed the fragmentations of pagan nations to Christian universalism, positing one "*geneōs tōn Christianōn*," Phot. *Bibl.* cod. 223.35–6.

36 The often quoted *Apology* of Aristides lists four human "races": barbarians who worshipped the created, Greeks who worshipped images of the created, Jews who worshipped the same God as Christians, and finally Christians (Aristides *Apology* 2; Olster 1995, 28; Lieu 1996, 167–8). In this, they had predecessors in Jewish writers (Philo, *De Abrahamo* 33.177, *De Josepho* 6.31). Josephus in *Ap.* 2.15 argues against Jews being counted as barbarians.

37 Danielou 1956, Bartelink 1967, Brakke 2006 with an earlier bibliography. Demons often assume a form of most visibly different ethnic other and appear as Ethiopians (see Brakke 2001; Brakke 2006, 157–81). For representations of demons or even the devil as an Ethiopian, see *The Martyrdom of Bartholomew* (= *Pseudo-Abdias*, Book 8) in *The Ante-Nicene Fathers* 8.556; *Epistle of Barnabas* 4.10, 18.1–2, 20.1. It should be perhaps noted that demons are already described as black by Lucian (*Philops.* 30–31; Winkler 1980, 161). Mango 1992, 216–17; Goldenberg, 1998.

38 It is illustrative to compare *De rebus Bellicis* 6.1 (c. 370 CE): "The first thing to know is that the madness of the nations lurking about everywhere surrounds the Roman Empire, and treacherous barbarity, concealed by advantageous terrain, assails every side of the frontiers," and August. *Serm.* 62.18: "Heretics, Jews and pagans: they have formed a unity over against our Unity." Similarly, Shenute believed that pagans, heretics, and sinners are united in Satan against Christians (Brakke 2006, 99–100). See also Higgs Strickland 2003, 83–7.

39 When Shenute describes the devil's formlessness and his ability to escape definition, he writes, addressing the devil: "you are not barbarian or any collection of evil people" (quoted after Brakke 2006, 104–5). Synesius of Cyrene labeled the Goths as "Scythians" in his *De Regno* to emphasize that his contemporary Goths, like the Scythians, could not be expected to keep their promises to the Romans (Heather 1999). Andreas of Crete, whose episcopacy in Gortyna (from c. 712 CE) saw the raids of the Arabs, never refers to them. What we find instead are numerous allusions to "barbarians," "Scythians," and "Sons of Hagar" (Andreas of Crete, *Homilies on Exaltation of the Cross* PG 97 co. 1033C; *Panegyric of Saint Titos* PG 97, col. 1168). The motives of vituperative

rhetoric of ancient ethnography continue to be employed; for example, Jerome repeats the accusation that Britons and Massagetae of cannibalism (Jer. *Adv. Iovinian.* 2.7; Isid. *Etym.* 9.2, 15.3; Tert. *Adversus Marcionem* 1.1).

40 Hom. Od. 10; Shaw 1990, 237–70. *Vie et Miracles de Sainte Thecle* Miracle 28.5; Honey 2006, 48. On Esau, see *Jer. Commentaria in Ezechielem* 11.25 PL 25.334 and Ambrose *De Cain et Abel* 1.1. PL 14.317.

41 In genealogies of *Genesis* 10.2 and *1 Chronicles* 1.5, Magog figures among the sons of Japhet. On Gog and Magog in Jewish Pseudoepigrapha and Rabbinical literature, see van Donzel, Schmidt, and Ott 2010, 6–9. Josephus identified the descendants of Magog with the Scythians (*AJ* 1.6.1). Later in antiquity, new northern peoples, the Goths, were believed to descend from Gog and Magog (*Chronicon Paschale* 1.46.11; Isid. *Etym.* 2. 26–7, 9.2.89; Theodoret of Cyrrhus, *In Ezekielem* PG 81.1271A. Ambrose in *De Fide* 1 declares, "Gog iste Gothus est." See Humphries 2010, 49–51 and 5; Anderson 1932, 10–15; Humphries 2010, 47–8; Merrills 2004, 198.

42 Jer. *Commentary on Ezekiel*, CCSL 75.525. When Jerome speaks of the invasions of the Huns across the Caucasus, he also alludes to their being enclosed by Alexander the Great (*Epistula* 77.6–8).

43 The enclosing of Gog and Magog is described in *Apocalypse of Pseudo-Methodius* 8.1–10; *Romance of Alexander* 2.32–4; Aerts 2011; Stoneman 2008, 45–67; Stoneman 1991, 3–7; Anderson 1932, 14–16 and 19; *Vita Andreae Sali* 25 PG 111.852; Rydén 1974, 258. On attempts to make Alexander into a proto-Christian, see Simon 1941, 177–91. See also Reinink 1985 and 2003; Ciancaglini 2001. This story is referred to in the Koran (Sura 18.91–8), where we read that the *Yajuj* and *Majuj*, two evil peoples, are shut up behind a strong wall built by the great conqueror.

44 August. *De civ. D.* 16:8–9, Isid. *Etym.* 11, Aethicus of Istria *Cosmography*, Hrabanus Maurus *De universo* 7. For *Liber Monstrorum*, see Orchard 2003, 86–115.

45 *Life of Saint Mercurios of Rome* 5–6, Isid. *Etym.* 11.3.15, Hrabanus Maurus *De universo* 7.7. In the fifth-century Aethicus *Cosmography* 2.28 places Cynocephali in the island of Munitia, in the north of Europe. Paul Deacon, *Historia Longobardorum* 1.11 writes that the Longobards made their enemies believe that they had in their army cynoscephalae so fierce they drank their own blood when they could not drink the blood of the enemy.

46 *Epistola Premonis ad Trajanum Imperatorem* 208; Lecouteux 1981, 121–2. In this context, it may be interesting to note that Manilius, in *Astronomicon*, writes that Sirius, the "little dog [star] (*Canicula*) barks the flames (*latraque canicula flammas*)." According to him, those born under this star were of a violent character. See Walter 1988, 157–8, 167–8. For the reappearance of the Kunokephaloi in *Historia de Preliis* by Leon of Naples, written between 950 and 970 CE, which was then passed into the Latin tradition of the Priester John, see Lecouteux 1981, 120; Faral 1914.

47 Van der Lugt 2008, 135–8.

48 While mocking the idea current in the early anti-Christian polemics, that the Christians constituted a "third race," the other two being pagans and Jews, Tertulian asks if the third race should not be identified as monstrous beings, such as Cynocephali, sciapodes, or antipodes ("*Tertium genus dicimur cynopennae aliqui vel Sciapodes vel aliqui de subterranean antipodes*," Tert. *Ad Nat.* 1.8). Similarly Tert. *Apol.* 8.5, where he asks if Christians are not men, but rather monsters like the Kunokephaloi or Sciapodes with rows of teeth for devouring, and different instruments for incest.

49 August. *De civ. D.* 16:8. Isidore does seem to count Kunokephaloi and satyrs among monkeys, enumerating in *Etymologies* 2.2 "*simia, sfinga, cynocephalus, satyrus, callithrix.*"

50 See also August. *De Trinitate* 7.4.7, where he writes that man is "as the ancients defined him, a rational, mortal animal." It may be worth putting Augustine's view in context of the early modern belief that pygmies and American Indians had no soul and descended from another, second Adam or were generated spontaneously from the earth. See Hanke 1959; Sorabji 1993, 136–8; Jahoda 1999. On the role of sons of Noah in construction of ethnicity in Middle Ages, see Braude 1997.

51 August. *De civ. D.* 16.8 and 51. Similarly Isid. *Etym.* 20.11.3. See also Flint 1984, 70.

52 August. *De civ. D.* 16.9. Similarly Isidore of Sevile rejects the idea of another human race in the antipodes, but is ready to accept antipodes as inhabitants of Libya who have their feet facing backwards: *Etym.* 11.3.24. See also Flint, 1984, 68–79.

53 Augustine assimilated the monstrous birth to the miraculous: it diverged from a stable order of nature, but this deviation was subordinated to a higher order with authority to shape them. He argued that no other evil God but a just, good God is the shaper of biological monstrosities: August. *Contra Julianum Pelagianum* 4.15.53 PL 44 col. 814; *Opus imperfectum contra Julianum* 1.116 PL45, col.

1125; *De civ. D.* 22.19. See Morgan 1984, 14. Isid. *Etym.* 9.3.1 stated that monstrosities are part of the creation and not "*contra naturam*."

54 Isidore writes: *Secundum diversitatem enim caeli et facies hominum et colores et corporum quantitates et animarum diversitates existent* (*Etym.* 9.2.105). See also Rufinus *Ecclesiastical History* 10.9; Socrates Scholasticus *Ecclesiastical History* 1.19; Sozomenus *Ecclesiastical History* 2.24.

55 The etymologies given by Augustine are: "*'monstra,' a monstrando; 'ostenta,' ab ostendendo; 'portenta,' a portendendo, i.e. præostendendo*; *'prodigia,' quod porro dicant, i.e. futura prædicant.*" Augustine concludes that God created monsters as part of his divine plan in order to teach humans a moral lesson (*De civ. D.* 16.8, 21.8). Similarly Isid. *Etym.* 4.119.22, 11.3.4, 11.3.8; Flint 1984, 71–2.

56 The parallel Greek term could not be used in a similar way, but it may be worth noting here that it come to designate heretical dogmas or pagan beliefs, or heresies: Gregory of Nazianzus *Epistula* 101 PG 37 col. 192. Hypocrites within the Church are described as Sirens or Centaurs in *Physiologus* 13.

57 Verner 2005, 2–7; 11–44.

58 Friedman 1981, 89.

59 The inspiration may be Genesis 4:15, where God puts a mark on Cain so that no one kills him: Emerson 1906, 924. Tert. *On the Resurrection* 42; August. *De civ. D.* 15.9 and 22. The belief that Cain was a son of Eve and Satan was condemned as heretical by Epiphanius (*Panarion* 40.5) and Irenaeus (*Adversus Haereses* 1.30). See also Friedman 1981, 93–107.

60 Suplicius Severus *Chronicorum* 1.2: "From their alliance giants are said to have sprung. For the mixture with them of beings of different nature as a matter of course gave birth to monsters." It is interesting that this passage reflects a notion well established in antiquity that monsters arose from cross-breeding of incompatible races (see notes 20–22 above). August. (*De civ. D.* 3.5 and 15.23) has doubts about the physical feasibility of such act. On demonically assisted "daughters of Cain," see Cassian *Conferences* 8.21. This illicit progeny is also sometimes interpreted as demons; see, e.g. 1 *Enoch* 1.8–12; Ps.-Clementine *Homilies* 8 and 9.

61 See, e.g. Ps.-Methodius, who counts Kunokephaloi among peoples of Gog and Magog, enclosed by Alexander. See Alexander and Abrahamse 1985, 41; Lecouteux 1981, 120.

62 The inscription on the map, behind Alexander's gate, reads: "*Hic (sunt) hominess truculenti nimis, humanis carnibus vescentes, cruorem potantes, filii Caini maledicti*." See also Scherb 2002. On Mappaemundi, see Halpern and Scully, this volume.

63 Athanasius *Life of Anthony* 53.1–3. On the appearance of demons in the works of Jerome generally, see Bartelink 1982, 463–9.

64 Brakke 2006, 34–5.

65 Jer. *Vita Pauli* 7.

66 Jer. *Vita Pauli* 8.

67 Merrills 2004, 218.

68 For discussions of possible interpretation, see Cox Miller 1996; Merrills 2004, 218–19.

69 The capacity of the monstrous races to provide a useful counterpoint to the failings of Christian continued to be used well into the Middle Ages. An interesting example is provided by a Latin text *Ad Fratres in Eremo,* dated probably to the thirteenth or fourteenth century, but thought to have been written by St. Augustine (*Sermo* 37 PL 40, cols. 1301–4).

70 Jer. *Vita Pauli* 8.

71 *Alexander Romance* Γ 2.32–33.

72 The apostolic mission to all men: Acts 2:4–5, 28:19; Mark 16:15; Matthew 28:19. Ratramnus of Corbie, ninth-century *Epistola de Cynocephalis* PL 121, cols. 1153–6 argued that the dog-headed people should be baptized to ensure salvation of their souls. See Bruce 2006.

73 On representations and functions of monstrous races on medieval maps, see Williams 1996, 24–5. On incorporating these beings into the mission of conversion, see Friedman 1981, 59–86.

74 For the notion of Rome as "*imperium sine fine*" (Verg. *Aen.* 1.278–9), see Nicolet 1991; Euseb. *Vit. Const.* 18; Oros. 5.2.3–4; Rufinus *Ecclesiastical History* 10.9; Socrates Scholasticus *Ecclesiastical History* 1.19; Sozomenus *Ecclesiastical History* 2.24.

75 Ancient confusion between Ethiopia and India seems reflected in a similar confusion in names of the Apostles assigned to these regions. According to Rufinus, Matthew had been assigned Ethiopia, and Bartholomew, "nearer India (*citerior India*), that was adjacent to it (i.e., Ethiopia). In the middle between Nearer India and Parthia, but at a considerable distance deeper within (*longo interior tractu*) lies Further India (*ulterior India*)" (Rufinus, *Ecclesiastical History* 10:9). Socrates Scholasticus, who follows Rufinus in many of the details regarding the evangelization of Ethiopia, reports that Matthew

had been assigned Ethiopia, and Bartholomew "to that part of India bordering on Ethiopia" (Socrates *Ecclesiastical History* PG 67 col. 125). For geography of the apocryphal *Acts of Judas-Thomas*, see Huxley 1983. For confusion of India and Ethiopia in antiquity and in Christian sources, see Mayerson 1993. See also Racine 2006, which considers these issues.

76 Baltimore Art Gallery MS 539 fol. 379r, 1262 CE; Paris Syr. 344, fol. 7. For other examples in Armenian art, see Le Quellec 1997, 419. It was posited that Kunokephaloi in Armenian representations stood for Mongols: several Armenian authors, such as Grigor d'Akner (d. 1272) and Kirakos of Ganjak (d. 1271) represent Mongolians as dog-faced people. Michael the Syrian speaks of "the land of Kunokephaloi where Apostle Andrew preached" (Michael the Syrian *Chronicle* 18). In the Cappadocian church of Kokar Kilise, Andrew is inscribed as "Andrew in Cynocepahalia" (Thierry and Tenenbaum 1963, 228–41). Kunokephaloi and other fabulous races are represented in the eleventh-century portal of Saint Mary Magdalene church in Vezley. See Le Gallic 2012. The humanity of monsters, both monstrous individuals and monstrous races, and their access to sacraments were controversial in the Middle Ages. See van der Lugt 2008. On a symbolism significance of Kunokephaloi, see Friedman 1981, 61.

77 For the reconstruction, see Zwierzina 1909. For the discussion, see Luchesi and Prieur 1978; White 1991, 36.

78 Budge 1899, 3–13.

79 *The Contendings of the Apostles*, 174–7.

80 On representations of St. Christopher as cynokephalos, see Gaidoz 1924; Bock 1997. Saintyves 1924; White 1991, 34–6. In the *Hermeneia* of the Book of Mount Athos, which was written quite late but the tradition of which dates from the late Byzantine epoch, we find the following phrase: *Christophoros ho reprobos ho ek tōn kunokephalōn* ("Christophoros the reprobate, one of the Kunokephaloi," Ameisenowa 1949, 42).

81 He travels with his face covered (*Contendings of the Apostles* 178), but when pagans throw him and the Apostle Andrew to the wild beasts, he uncovers his face and asks God to temporarily return him to his beastly nature (*Contendings of the Apostles* 179–80). The motif of Kunokephaloi overcoming their beastly nature upon converting to Christianity seems an inversion of accounts where demons who appear as beautiful and docile to sinners are forced to reveal their real ugly nature to Christian saints. See, e.g. *Apophtegmata Patrum* 5.27.

82 *Contendings of the Apostles* 182.

83 White 1991 37–8. The martyrdom of Christopher in the Latin calendar falls on July 25, the same day when the Coptic Church celebrates the martyrdom of Saint and Coptic Mercurius. Like Christopher, Mercurius suffered martyrdom at the hands of the pagan emperor Decius.

84 Friedman 2000, 72. The Cynocephali appear only in an Arabic version of his life, Alexandrian synaxaria, and in a fifteenth-century Ethiopian recension of his life: Piankof 1942, 17–24.

85 This process seems to parallel exorcisms. In *Contending of Apostles* 127 and 133, a man is "made whole when a devil is cast out." In the *Testament of Twelve Patriarchs* 3.1–4.9, seeking the Lord and loving others causes evil spirits to depart. See also Dölger 1909, 25–38 and 127; Sorensen 2002, 209–13; Bruce 2006, 55.

86 According to the eighth-century Barberini Euchologion, three exorcism prayers were recited at the beginning of the baptismal rite (Parenti and Velkovska 1995, 102). Similarly, see John Chrysostom *Baptismal Catechesis* 2.12; Gregory of Nazianzus *In sanctum baptisma*, 178 PG 36 col. 409.

87 In the *Passio Bartholomaei*, for instance, he is described as having a pointed head like a dog's, a thin beard, hair down to his feet, fiery eyes, and spiky wings of a porcupine: *Acta apostolorum apocrypha*, 146; Mango 1992, 221. In the *Contendings of Apostles,* the devil is hairy and black (*Contendings of the Apostles* 152–3). On other occasions, however, Satan manifests himself in the form of fire (*Contendings of the Apostles* 75). In Byzantine art, the devil and demons never acquire the frightening, hybrid forms they have in the West (Provatakis 1980).

88 Higgs-Strickland 2007, 111–12. In the *Life of St. Andrew the Fool* 114, the black figures of demons are reported as "striking terror mixed with disgust." See also Greenfield 1988, 24–8.

89 Kazhdan 1990, 135; Hatzaki 2010, 100–102. A strong caveat can be found in 2 Corinthians 11:13–14, where St. Paul writes: "For such men are false apostles, deceitful workmen, masquerading as apostles of Christ. And no wonder, for Satan himself masquerades as an angel of light." Palladius *Historia Lausiaca* 25 gives the story of a hermit named Valens, who was deceived by demons who appeared to him in form of angels.

90 Curiously, *Apocalypse of Baruch* 1, places men "who had faces like cattle, horns like stags, feet like goats and haunches like lambs" identified as the builders of the Tower of Babel in the first and second heaven, even though they are sinners: Amaisenowa 1949, 27.
91 *The Life of St. Andrew the Fool* 2.140.
92 Bigwood 1989.
93 In the *Timarion*, the twelfth-century Byzantine satire, the protagonist says that his release from hell is "as unrealistic as . . . hippocentaurs, sphinxes, and all the other mythological fabrications of the ancients" (*Timarion* 27).
94 *Michaelis Pselli Philosophica minora* 1.158.15–26.
95 On other representations of Cynocephali, see Maguire 1999, 192–202. See also Corrigan 1992, 49.
96 They are identified as Jews by an inscription that is now only partly legible. See Corrigan 1992, 49, n. 32; Maayan-Fanar 2009, 266.
97 Xyngopoulos 1966, fig. 129; Maguire 1999, 192.
98 Psalm 21 was typologically interpreted by Paul, who labeled the Jews dogs in his Epistle to Philippians 3:2. This became a common epithet in polemical literature, e.g. Justin Martyr *Dialogue with Trypho* 104; Theodoret *Interpretation of Psalms* PG 80.1016–17; Hesychius of Jerusalem *On the Titles of the Psalms* PG 27.724.
99 For discussion of fantastic races in the Latin Middle Ages, see Campbell 1988 (esp. 47–86 and 122–64); Bartlett 2008, 71–110; Valtrova 2010.

Bibliography

Aerts, Willem. J. 2011. "Magog, Dogheads and Other Monsters in the Byzantine World." In *Embodiments of Evil: Gog and Magog. Interdisciplinary Studies of the "Other,"* edited by A.A. Seyed-Gohrab, F. Doufikar-Aerts and S. McGlinn, 23–36. Leiden: Leiden University Press.

Alexander, Paul Julius, and Dorothy deF Abrahamse. 1985. *The Byzantine Apocalyptic Tradition*. Berkeley: University of California Press.

Almagor, Eran. 2005. "Who is Barbarian? The Barbarian in the Ethnological and Cultural Taxonomies of Strabo." In *Strabo's Cultural Geography: The Making of a Klossourgia*, edited by D. Dueck, H. Lindsay, and S. Pothecary, 42–55. Cambridge: Cambridge University Press.

Ameisenowa, Zofia. 1949. "Animal-Headed Gods, Evangelists, Saints and Righteous Men." *Journal of the Warburg and Courtauld Institutes* 12: 21–45.

Anderson, Andrew. R. 1932. *Alexander's Gate, Gog and Magog and the Enclosed Nations.* Cambridge, MA: The Medieval Academy of America.

Bartelink, G.J.M. 1967. "Le Demons Comme Brigands." *Vigiliae Christianae* 21: 12–24.

——. 1982. "Le diable et les démons dans les oeuvres de Jérôme." *Studia Patristica* 17: 463–9.

Bartlett, Robert. 2008. *The Natural and the Supernatural in the Middle Ages: The Wiles Lecture Given at the Queen's University of Belfast, 2006*. Cambridge: Cambridge University Press.

Barton, Tamsyn. 1994. *Power and Knowledge: Astrology, Physiognomics, and Medicine under the Roman Empire.* Ann Arbor: University of Michigan Press.

Benabou, M. 1975. "Monstres et Hybrides chez Lucréce et Pline l'Ancien." In *Homes et Bêtes: Entretiens sur le Racisme*, edited by L. Poliakov, 143–52. Paris: Mouton.

Bigwood, Joan. M. 1989. "Ctesias' *Indica* and Photius." *Phoenix* 43: 302–16.

Bock, Martin. 1997. *Christophoros Kynokephalos: Die Darstellungen des Hundsköpfigen Christophoros auf Ikonen des Ikonen-Museums Recklinghausen*. Recklinghausen: Museen der Stadt Recklinghausen.

Boys-Stones, George. 2007. "Physiognomy and Ancient Psychological Theory." In *Seeing the Face, Seeing the Soul: Polemon's Physiognomy from Classical Antiquity to Medieval Islam*, edited by Simon Swain, 19–124. Oxford: Oxford University Press.

Brakke, David. 2001. "Ethiopian Demons: Male Sexuality, the Black-Skinned Other, and the Monastic Self." *Journal of the History of Sexuality* 10: 501–35.

——. 2006. *Demons and the Making of the Monk: Spiritual Combat in Early Christianity*. Cambridge, MA: Harvard University Press.

Braude, Benjamin. 1997. "The Sons of Noah and the Construction of Ethnic and Geographical Identities in the Medieval and Early Modern Periods." *The William and Mary Quarterly.* 54(1): 103–42.

Bruce, Scott. 2006. "Hagiography as Monstrous Ethnography: A Note on Ratramnus of Corbie's Letter Concerning the Conversion of the Cynocephali." In *Insignis Sophiae Arcator: Essays in Honour of*

Michael W. Herren on His 65th Birthday, edited by Michael W. Herren, Gernot R. Wieland, Carin Ruff, and Ross Gilbert Arthur, 45–56. Turnhout: Brepols.
Budge, Ernest Alfred Wallis, trans. 1899. *The Contendings of the Apostles: Being the Histories of the Lives and Martyrdoms and Deaths of the Twelve Apostles and Evangelists*. The Ethiopic texts now first edited from manuscripts in the British Museum, with an English translation Ernest Alfred Wallis Budge. London: British Museum.
Buell, Denise. 2002. "Race and Universalism in Early Christianity." *Journal of Early Christian Studies* 10(4): 429–68.
Campbell, Mary B. 1988. *The Witness and the Other World: Exotic European Travel Writing, 400–1600*. Ithaca, NY: Cornell University Press.
Chauvot, Alain. 1998. *Opinions Romaines Face aux Barbares au IVe Siècle ap. J.-C*. Paris: De Boccard.
Ciancaglini, Claudia. A. 2001. "The Syriac Version of the Alexander Romance." *Le Museon, Revue d'Etudes orientales* 114(1–2): 121–40.
Corrigan, Kathleen. 1992. *Visual Polemics in the Ninth-Century Byzantine Psalters*. Cambridge: Cambridge University Press.
Dagron, Gilbert. 1987. "Image de Bête ou Image de Dieu." In *Poikilia: Études Offertes à Jean-Pierre Vernant*, edited by Jean Pierre Vernant, 69–80. Paris: Editions de l'Écoles Hautes Études en Sciences Sociales.
Danielou, Jean. 1956. "Les Demons de l'Air dans la Vie d'Antoine." *Studia Anselmiana* 38: 136–7.
Dierauer, Urs. 1977. *Tier und Mensch im Denken der Antike: Studien zur Tierpsychologie, Anthropologie und Ethik*. Amsterdam: Grüner.
Dölger, Franz Joseph. 1909. *Der Exorcismus im Altchristlichen Taufritual: Eine Religionsgeschichtliche Studie*. Studien zur Geschichte und Kultur des Altertums, Bd. 3, Heft 1–2.
Evans, Elizabeth Cornelia. 1969. *Physiognomics in the Ancient World*. Philadelphia, PA: American Philosophical Society.
Evans, Rhiannon. 1999. "Ethnography's Freak Show. The Grotesque at the Edges of the Roman Earth." *Ramus* 28(1): 54–73.
Faral, Edmond. 1984. "Une Source Latine de 'l'Histoire d'Alexandre,' la 'Lettre sur les Merveilles del'Inde'." *Romania* 43: 202–15 and 353–7.
Flint, Valerie. 1984. "Monsters and the Antipodes in the Early Middle Ages and Enlightenment." *Viator* 15: 65–70.
Friedman, John Block. 2000. *The Monstrous Races in Medieval Art and Thought*. Cambridge, MA: Harvard University Press.
Gaidoz, Henri. 1924. "Saint Christophe à tête de chién en Irlande et en Russie." *Mémoires de la Sociéte Nationale des Antiquaires de France* 76: 192–218.
Garland, Robert. 2010. *The Eye of the Beholder: Deformity and Disability in the Graeco-Roman World*. London: Bristol Classical.
Geary, Patrick. 1999. "Barbarians and Ethnicity." In *Late Antiquity: A Guide to the Postclassical World*, edited by G.W. Bowersock, Peter Brown and Oleg Grabar, 107–29. Cambridge, MA: Belknap Press of Harvard University Press.
Goldenberg, D. 1998. "Scythian-Barbarian: The Permutations of a Classical Topos in Jewish and Christian Texts of Late Antiquity." *Journal of Jewish Studies* 49: 87–102.
Gottwald, Norman. 2007. "The Interplay of Religion and Ethnicity in Ancient Israel." In *To Break Every Yoke. Essays in Honor of Marvin L Chaney*, edited by Robert B. Coote, Norman K. Gottwald, and Marvin L. Chaney, 112–45. Sheffield: Sheffield Phoenix.
Greenfield, R.P.H. 1988. *Traditions of Belief in Late Byzantine Demonology*. Amsterdam: Hakkert.
Hall, Edith. 1989. *Inventing the Barbarian: Greek Self-Definition through Tragedy*. Oxford: Clarendon Press.
Hanke, Lewis. 1959. *Aristotle and the American Indians: A Study in Race Prejudice in the Modern World*. Chicago, IL: H. Regnery Co.
Hartog, François. 1988. *The Mirror of Herodotus: The Representation of the Other in the Writing of History*. Berkeley: University of California Press.
Hatzaki, Myrto. 2010. "The Good, the Bad and the Ugly." In *A Companion to Byzantium,* edited by Liz James, 93–107. Chichester: Wiley-Blackwell.
Heather, Peter. 1999. "The Barbarian in Late Antiquity: Image, Reality, and Transformation." In *Constructing Identities in Late Antiquity,* edited by Richard Miles, 234–58. London: Routledge.

Higgs Strickland, D. 2003. *Saracens, Demons and Jews. Making Monsters in Medieval Art.* Princeton, NJ: Princeton University Press.

Honey, Linda. 2006. "Justifiably Outraged or Simply Outrageous? The Isaurian Incident of Ammianus Marcellinus 14.2." In *Violence in Late Antiquity: Perceptions and Practices,* edited by H.A. Drake, 47–56. Aldershot: Ashgate.

Humphries, Mark. 2010. "'Gog is the Goth:' Biblical Barbarians in Ambrose of Milan's *De Fide*." In *Unclassical Traditions: Alternatives to the Classical Past in Late Antiquity*, edited by Christopher Kelly, Richard Flower, and Michael Stuart Williams, 44–58. Cambridge: Cambridge Philological Society.

Huxley, George. L. 1983. "Geography in the Acts of Thomas." *Greek, Roman, and Byzantine Studies* 24(1): 71–80.

Jahoda, Gustav. 1999. *Images of Savages: Ancients* [*sic*] *Roots of Modern Prejudice in Western Culture*. London: Routledge.

Karttunen, Klaus. 1984. "Kynokephaloi and Kynomolgoi in Classical Ethnography." *Arctos* 18: 31–6.

Kazhdan, Alexander. 1990. "Byzantine Hagiography and Sex in the Fifth to Twelfth Centuries." *Dumbarton Oaks Papers* 44: 131–43.

Kim, Hyun Jin. 2013. "The Invention of the 'Barbarian' in Late Sixth-Century BC Ionia." In Eran Almagor and Joseph Skinner, *Ancient Ethnography: New Approaches.* London: Bloomsbury.

Kominko, Maja. 2013. *The World of Kosmas. Illustrated Byzantine Manuscripts of the Christian Topography*. Cambridge: Cambridge University Press.

Lecouteux, Claude. 1981. "Les Cynocéphales: Études d'une Tradition Tératologique de l'Antiquité au Xiiᵉ Siècle." *Cahier de Civilisations Médiévales* 24: 117–28.

Le Gallic, Maï. 2012. "Le Tympan de Vézelay: Les Peuples de la Terre dans la Pensée et l'Art Roman : Traditions Iconographiques et Littéraires," École doctorale arts, lettres, langues, Rennes.

Le Quellec, Jean-Luc. 1997. "Cynocéphale et Pentecôte." In *Pentecôte: de l'Intime au Social,* edited by Georges Bertin and Marie-Claude Rousseau, 415–33. Laval: Siloe.

Lieu, Judith. 1996. *Image and Reality: The Jews in the World of the Christians in the Second Century*. Edinburgh: T&T Clark.

Louis, Pierre. 1975. "Monstres et Monstruosities dans la Biologie d'Aristote." In *Le Monde Grec: Pensée, Littérature, Histoire, Documents: Hommages à Claire Préaux*, edited by Claire Préaux, Jean Bingen, Guy Cambier, and Georges Nachtergael, 277–84. Bruxelles: Editions de l'Université de Bruxelles.

Luchesi, Enzo., and J.-M. Prieur. 1978. "Fragments Coptes des Actes d'André et Matthiaset d'André et Barthélémy." *Analecta Bollandiana* 96: 339–50.

Maayan-Fanar, Emma. 2009. "Silenus among the Jews? Anti-Jewish Polemics in Ninth-Century Byzanine Marginal Psalters." In *Between Judaism and Christianity: Art Historical Essays in Honor of Elisheva (Elisabeth) Revel-Neher*, edited by Elisabeth Revel-Neher, Katrin Kogman-Appel, and Mati Meyer, 259–78. Leiden: Brill.

Maguire, Henry. 1999. "The Profane Aesthetic in Byzantine Art and Literature." *Dumbarton Oaks Papers* 53: 189–205.

Mango, Cyril. 1992. "Diabolus Byzantinus." *Dumbarton Oaks Papers* 46: 215–23.

Mayerson, Philip. 1993. "A Confusion of Indias: Asian India and African India in the Byzantine Sources." *Journal of the American Oriental Society* 113(2): 169–74.

McCoskey, Denise. E. 2003. "By Any Other Name? Ethnicity and the Study of Ancient Identity." *Classical Bulletin* 79: 93–109.

McGowan, Andrew. 1994. "Eating People: Accusations of Cannibalism against Christians in the Second Century." *Journal of Early Christian Studies* 2(4): 413–42.

Merrills, Andrew. H. 2004. "Monks, Monsters and Barbarians: Re-Defining the African Periphery in Late-Antiquity." *Journal of Early Christian Studies* 12(2): 217–44.

Millar, Fergus. 2005. "The Review of Isaac, B. *The Invention of Racism in Classical Antiquity.*" *The International History Review* 27(1): 85–9.

Morgan, Wendy. 1984. "Constructing the Monster Notions of the Monstrous In Classical Antiquity." PhD thesis, Deakin University, Victoria.

Nicolet, Claude. 1991. *Space, Geography, and Politics in the Early Roman Empire*. Ann Arbor: University of Michigan Press.

Olster, David. M. 1995. "Classical Ethnography and Early Christianity." In *The Formulation of Christianity by Conflict Through the Ages*, edited by K.B. Free, 9–32. Lewiston, NY: Edward Mellen.

Orchard, Andy. 2003. *Pride and Prodigies*. Toronto: Toronto University Press.
Parenti, Stefano, and Elena Velkovska, eds. *L'Eucologio Barberini gr. 336*. Bibliotheca "Ephemerides Liturgicae." *Subsidia* 80, 2nd edn., Rome.
Piankoff, Alexandre. 1942. "Saint Mercure Abu Seifein et les Cynocephales." *Bulletin de la Soc. d'Archéologie Copte* 8: 17–24.
Provatakis, Thomas. M. 1980. *Ο διάβολος εις την βνζαντινήν τέχνην*, Thessaloniki.
Racine, Felix. 2006. "Geography, Identity and the Legend of Saint Christopher." In *Religious Identity in Late Antiquity*, edited by R.M. Frakes and E. DePalma Digeser, 106–25. Toronto, ON: Kent.
Rawson, Claude Julien. 2001. *God, Gulliver, and Genocide: Barbarism and the European Imagination, 1492–1945*. Oxford: Oxford University Press.
Reinink, Gerrit. J. 1985. "Die Entstehung der Syrischen Alexander-Legend als Politisches-Religios Propagandaschrift für Herakleios' Kirchenpolitik." In *After Chalcedon: Studies in Theology and Church History Offered to Professor Albert Van Roey for His Seventieth Birthday*, edited by A. van Roey, Carl Laga, Joseph A. Munitiz, and Lucas van Rompay, 263–81. Leuven: Dept. Oriëntalistiek.
——. 2003. "Alexander the Great in Seventh-Century Syriac Apocalyptic Texts." *Byzantinorossica* 2: 150–78.
Riggsby, Andrew M. 2006. *Caesar in Gaul and Rome: War in Words*. Austin: University of Texas Press.
Romm, James S. 1992. *The Edges of the Earth in Ancient Thought: Geography, Exploration, and Fiction*. Princeton, NJ: Princeton University Press.
Rydén, Lennart. 1974. "The Andreas Salos Apocalypse, Greek Text, Translation, and Commentary." *Dumbarton Oaks Papers* 28: 197–261.
Saintyves, Pierre. 1924. "L'origine de la Tête de Chien de Saint Christophe." *Revue Anthropologique* 34: 376–83.
Salzman, Michele. R. 2006. "Symmachus and the 'Barbarian' Generals." *Historia: Zeitschrift für Alte Geschichte* 55(3): 352–67.
Scherb, Victor. I. 2002. "Assimilating Giants: The Appropriation of Gog and Magog in Medieval and Early Modern England." *Journal of Medieval and Early Modern Studies* 32(1): 59–84.
Shaw, Brent. D. 1982/3. "Eaters of Flesh, Drinkers of Milk: The Ancient Mediterranean Ideology of the Pastoral Nomad." *Ancient Society* 13/14: 5–31.
Simon, Marcel. 1941. "Alexandre le Grand, Juif et Chrétien." *Revue d'Histoire et de Philosophie Religieuses* 21: 177–91.
Sorabji, Richard. 1993. *Animal Minds and Human Morals: The Origins of the Western Debate*. Ithaca, NY: Cornell University Press.
Sorensen, Eric. 2002. *Possession and Exorcism in the New Testament and Early Christianity*. Tübingen: Mohr Siebeck.
Stoneman, Richard, trans. 1991. *The Greek Alexander Romance*. London: Penguin Books.
——. 2008. *Alexander the Great: A Life in Legend*. New Haven, CT: Yale University Press.
Thierry, Nicole, and A. Tenenbaum. 1963. "Le Cenacle Apostolique à Kokar Kilise et Ayval Kilise en Cappadoce: Mission des Apôtres, Pentecôte, Jugement Dernier." *Journal des Savants* 4(4): 228–41.
Valtrova, Jana. 2010. "Beyond the Horizons of Legends: Traditional Imagery and Direct Experience in Medieval Accounts of Asia." *Numen* 57: 154–85.
Van der Lugt, Maaike. 2008. "L'humanité des Monstres et Leur Accès aux Sacrements dans la Pensée Médiévale." In *Monstre et Imaginaire Social: Approches Historiques,* edited by Anna Caiozzo, Anne-Emmanuelle Demartini, and Pierre Ancet, 135–62. Paris: Creaphis.
Van Donzel, Emeri. J., Andrea B. Schmidt, and Claudia Ott. 2010. *Gog and Magog in Early Eastern Christian and Islamic Sources: Sallam's Quest for Alexander's Wall*. Leiden: Brill.
Verner, Lisa. 2005. *The Epistemology of the Monstrous in the Middle Ages*. New York: Routledge.
Veyne, Paul. 1993. "Humanitas: Romans and non-Romans." In *The Romans*, edited by Andrea Giardina, 342–70. Chicago, IL: University of Chicago Press.
Walter, Philippe. 1988. *Canicule: Essai de Mythologie sur Yvain de Chrêtien de Troyes*. Paris: SEDES.
White, David Gordon. 1991. *Myths of the Dog-man*. Chicago, IL: University of Chicago Press.
Wiedemann, T.E.J. 1986. "Between Man and Beasts: Barbarians in Ammianus Marcellinus." In *Past Perspectives: Studies in Greek and Roman Historical Writing: Papers Presented at a Conference at Leeds, 6–8 April 1983*, edited by I.S. Moxon, J.D. Smart, and A.J. Woodman, 189–211. Cambridge: Cambridge University Press.
Williams, David. 1996. *Deformed Discourse: The Function of the Monster in Mediaeval Thought And Literature*. Montreal, Canada: McGill-Queen's University Press.
Winkler, Jack. J. 1980. "Lollianos and the Desperadoes." *Journal of Hellenic Studies* 100: 155–81.

Wittkower, Rudolf. 1942. "Marvels of the East: A Study in the History of Monsters." *Journal of the Warburg and Courtauld Institutes* 5: 159–97.

Woolf, Greg. 2011. *Tales of the Barbarians: Ethnography and Empire in the Roman West*. Chichester: Wiley-Blackwell.

Xyngopoulos, Andre. 1966. *Les Miniatures du Roman d'Alexandre le Grand dans le Codex de l'Institut Hellenique de Venise*. Athenes: Inst. Hellenique d'Études Byzantines et Post-Byzantines de Venise.

Zwierzina, Konrad. 1909. "Die Legenden der Martyr von Unzetstörbaren Leben." in *Innsbrücker Festgross von der Philosophischen Fakultat*, 130–58. Innsbruck, Austria: Innsbruck University Press.

22

"THEIR LANDS ARE PERIPHERAL AND THEIR *QI* IS BLOCKED UP"

The uses of environmental determinism in Han (206 BCE–220 CE) and Tang (618–907 CE) Chinese interpretations of the 'barbarians'

Shao-yun Yang

Introduction

The subject of environmental determinism in pre-modern Chinese discourses of identity has received relatively little scholarly attention, particularly when compared to the lively controversy and debate stimulated by Benjamin Isaac's interpretation of classical Greco-Roman environmental determinism as "proto-racism," just over a decade ago.[1] This neglect is partly due to a highly influential theory claiming that the pre-modern Chinese defined the boundary between them and other peoples in terms of 'culture,' not 'race,' or 'nation.'[2]

Uffe Bergeton has recently argued that this notion of pre-modern Chinese identity as a kind of 'culturalism' originated in the 1940s and 1950s with John King Fairbank and Joseph Levenson, who played key roles in establishing the study of modern Chinese history in the United States.[3] Both Fairbank and Levenson were interested in explaining why the Chinese did not have a strong sense of national identity before the early twentieth century. To them, the answer was that pre-modern Chinese identity was a *cultural* identity predicated on a sense of cultural superiority and a belief that the Chinese possessed a universal civilization that other peoples (regarded as 'barbarians' without a civilization of their own) could adopt through a process of education and acculturation. In what has come to be called the 'culturalism to nationalism thesis,' Levenson argued that the Chinese only became nationalists, rather than culturalists, at the turn of the nineteenth and twentieth centuries, when they lost their sense of cultural superiority and began to advocate the adoption of foreign ideas and ideologies that they now credited with bringing 'modernity' or 'modern civilization' to the Western world.[4]

Although I agree with Bergeton that Fairbank and Levenson (especially the latter) popularized the concept of Chinese 'culturalism' in Western scholarship, I think we should also recognize that parallel developments in China were producing what one could call a 'culturalism, not racism' interpretation of pre-modern Chinese identity. This is somewhat

ironic, because early twentieth-century Chinese nationalist ideologues and historians had reinterpreted history to redefine the Han Chinese people as a race with a common ancestry or 'bloodline.' As recent scholarship by James Leibold has shown, the Nationalist Party or Guomindang (Kuomintang), which governed much of China from 1927 to 1949, propagated such an ideology of racial nationalism, albeit with expedient modifications to incorporate the non-Han ethnic groups within China's normative borders into the Chinese 'race.'[5] By the 1940s, however, global reaction against the extremes of Nazi racialism seems to have shifted the balance in favor of 'culturalist' thinking among Chinese scholars. During that decade, for example, the historians Chen Yinke and Qian Mu—both of whose intellectual stature in the Chinese-speaking world matches that of Fairbank and Levenson in America—asserted in their works that "culture" (*wenhua*), not "bloodline" (*xuetong*), was the marker of Chinese-ness in ancient and medieval times.[6] Although historians during China's Maoist period (1949–78) were required to deny that culture had any historical importance and to stress class identities instead, the 'culturalism, not racism' formulation returned to favor in the 1980s and remains standard in Chinese historiography in the early twenty-first century. Moreover, it has consistently been part of the historiographical mainstream in Hong Kong and Taiwan.

In 1992, the introductory chapter of Frank Dikötter's *The Discourse of Race in Modern China*, provocatively titled "Race as Culture," rejected the 'culturalism, not racism' formulation as a "delusive myth" based on a "highly idealized vision of the Chinese past," arguing: "The dichotomy between culture and race, which has proved to be a viable conceptual tool in analyzing modern attitudes towards outsiders, should be abandoned in [the case of analyzing Chinese antiquity]." Claiming that "[p]hysical composition and cultural disposition were confused in Chinese antiquity," Dikötter sought to show that "a racial consciousness existed in an embryonic form well before the arrival of Europeans in the nineteenth century."[7] In effect, Dikötter posited the existence of a classical Chinese 'proto-racism,' although he (unlike Isaac) did not use that term.

By Dikötter's own admission, his evidence for this embryonic racial consciousness was "tentative" and unsystematic because of "the absence of substantial studies concerning the construct of race or the social perception of physical features in traditional China." Whereas the bulk of Dikötter's book was based on close readings of modern Chinese writings on race, his understanding of pre-modern Chinese discourses on the 'barbarians' relied heavily on a range of Western-language secondary sources of widely varying date and reliability. Dikötter's unfamiliarity with pre-modern Chinese sources thus limited him to a cursory two-paragraph discussion of environmental determinism in the Han (206 BCE–220 CE) and Tang (618–907 CE) dynasties, in which he made reference to only two thinkers: Zheng Xuan (127–200 CE) and Du You (735–812 CE).[8]

Over twenty years after the publication of *The Discourse of Race in Modern China*, the lack of historical scholarship on environmental determinism in pre-modern Chinese thought remains as evident as it was then. This chapter will take a step toward filling that gap, by tracing the earliest evidence of ideas of environmental determinism and explaining how they later came to be linked to arguments about the purported moral inferiority of the 'barbarians,' first in the Han dynasty and again in the Tang. I will build on Yuri Pines's argument that "an idea of the barbarians' inborn or strictly environmentally determined savagery" was a product of the unified Chinese empires and, more specifically, of the second such empire, the Han. I will also, however, propose an alternative to Pines's contention that the idea arose due to a new Chinese perception of the nomadic peoples of the northern steppe, particularly the Xiongnu, as unassimilable and therefore absolutely Other, unlike other 'barbarian' groups that the Chinese had previously absorbed successfully.[9] Instead, I argue that Han and Tang

discourses of barbarian moral inferiority, otherness, and unassimilability, of which notions of environmental determinism formed a part, were rooted in a tradition of anti-expansionist rhetoric deployed by officials who saw constant warfare against foreign polities as a threat to the stability of the Chinese state. In effect, this rhetorical tradition sought to persuade Chinese rulers that the 'barbarians' were morally unimproveable and hence unworthy of the benefits of Chinese rule—and, implicitly, not worth the costs of conquest. The fact that the Han and Tang empires' 'barbarian' enemies were often steppe nomads is incidental, not essential, to the existence of such arguments.

The *Liji* and the *Huainanzi*

One of the most often-cited classical Chinese texts on the 'barbarians' is a passage in a chapter of the *Liji*, titled "Wangzhi'" (Regulations of the Kings). The same passage should also be regarded as an early attempt at explaining cultural diversity in terms of environmental influences:

> Wherever the people live, their bodily capacities are sure to vary according to the influence of heaven and earth, such as whether the climate is cold or hot, dry or humid, or whether the terrain is one of wide valleys or large rivers. The people born in these different places have different customs. [Under the former kings,] their temperaments, whether hard or soft, lighthearted or serious, slow or hasty, were made uniform by different measures; their preferences as to flavors were differently harmonized; their implements were differently made; their clothes were differently fashioned, but always suitably. They were taught, but without changing their customs, and the methods of governance were made uniform, but without changing the suitability in each case.
>
> The peoples of the five regions—the Central Lands and the [four regions of the] Rong-Yi—had each their own innate nature, which they should not be made to alter. The peoples to the east were called Yi. They left their hair untied and tattooed their bodies. Some of them ate their food without cooking it. Those to the south were called Man. They tattooed their foreheads and were pigeon-toed. Some of them ate their food without cooking it. Those to the west were called Rong. They left their hair untied and wore animal skins. Some of them did not eat grains. Those to the north were called Di. They wore feathers and furs and dwelt in caves. Some of them did not eat grains. The people of the Central Lands and the Yi, Man, Rong, and Di all had their dwellings in which they lived at ease; their flavors which they preferred; the clothes suitable for them; their proper implements for use; and all the vessels needed for their way of life. In those five regions, the languages of the people were not mutually intelligible, and their desires were different.[10]

In this passage, "the Central Lands" (*Zhongguo*), also often translated as "the Central States" or (less accurately) "the Middle Kingdom," refers to the Chinese world. To this day, *Zhongguo* remains the name by which the Chinese most commonly refer to their country. Note that the passage uses the compound *Rong-Yi* synecdochically to refer collectively to the Yi, Man, Rong, and Di peoples. Other such synecdochic combinations are found in early Chinese texts: *Man-Yi* and *Rong-Di*, and also *Rong-Yi* and *Yi-Di* and occasionally *Man-Mo*, *Mo* being a label associated with foreign peoples of the northeast. Uffe Bergeton has demonstrated systematically that the Chinese began to use such compounds, as well as *Yi* and the numerical expression "four Yi"

("four kinds of Yi" or "Yi of the four quarters"), as standard synecdochic labels for all foreign peoples during the Warring States period (c. 476–221 BCE).[11] These labels later acquired such prestige and authority by virtue of their use in the 'Confucian' Classics that the Chinese continued to apply them to foreign peoples until the late nineteenth century.

The "Wangzhi" purports to record information about the Zhou dynasty (ca. 1046–256 BCE), the first centuries of which were frequently idealized in Warring States times, and again from the Han dynasty on, as a golden age of ideal government by sages. The passage quoted above reads, for example, like a utopian blueprint for a multi-ethnic and multicultural empire. The textual history of the *Liji* is very poorly understood: as Jeffrey Riegel tells us, its 49 chapters are "extremely diverse and miscellaneous in their styles and contents as well as in the origins of the materials of which they are constituted."[12] Some of the chapters are probably of Han origin; others may date from the Warring States. The process by which these various texts were collated, edited, and compiled into the *Liji* may have been quite long, stretching from ca. 26 BCE to ca. 100 CE. One may therefore doubt the degree to which the "Wangzhi" reflects actual ethnographic information about the peoples who were known to the Chinese as Yi, Man, Rong, and Di during the Warring States period. No such information can be found in any other extant text, making it difficult to corroborate the "Wangzhi" description's accuracy. Modern readers of the passage tend to notice most of all how the Yi, Man, Rong, and Di are depicted as primitives with a less advanced material culture than that of the Chinese, but it is striking that the passage does not recommend that the ideal ruler 'civilize' these peoples by changing their ways of life to conform to Chinese ways. On the contrary, it asserts that each people lives, eats, and dresses in a manner perfectly suited to its environment and its "innate nature" (*xing*). Nor is any suggestion made that the different natures of the Yi, Man, Rong, and Di make them morally or intellectually inferior to the Chinese.

A similar fivefold schema for categorizing the world's peoples, but with an emphasis on geography and physiology rather than material culture, can be found in the *Huainanzi*, an encyclopedic work compiled around 140 BCE by a team of scholars associated with the Han aristocrat Liu An (ca. 179–122 BCE). A chapter entitled "Terrestrial Forms" contains the following description of the east, south, west, north, and center, which correspond to the Korean peninsula, south China, the Tibetan plateau, the Mongolian steppe, and north China respectively:

> The east is where streams and valleys flow to and whence the sun and moon arise. The people of the east are heavy bodied and have small heads, prominent noses, and large mouths. They have raised shoulders like hawks and walk on tiptoe. All their bodily openings are channeled to their eyes . . . The people there are tall and large; they become knowledgeable early but are not long-lived. The land there is suitable for wheat; it is full of tigers and leopards.
>
> The south is where yang *qi* gathers. Heat and damp reside there. The people of the south have long bodies and are heavy above. They have large mouths and prominent eyelids. All their bodily openings are channeled to their ears . . . The people there mature early but die young. The land there is suitable for rice; it is full of rhinoceroses and elephants.
>
> The west is a region of high ground. Rivers issue forth from there, and the sun and moon set there. The men of the west have ill-favored faces and misshapen necks but walk with dignity. All their bodily openings are channeled to their noses . . . The people there are daring but not humane. The land there is suitable for millet; it is full of yaks and rhinoceroses.

> The north is a dark and gloomy place where the sky is closed up. Cold and ice are gathered there . . . The bodies of the people of the north are tightly knit, with short necks, broad shoulders, and low-slung buttocks. All their bodily openings are channeled to their genitals . . . The people there are stupid as birds and beasts but are long-lived. The land there is suitable for legumes and is full of dogs and horses.
>
> The center is where the wind and *qi* come together from all directions and is the place of confluence of the rains and the dew. The people of the center have large faces and short chins. They consider beards beautiful and dislike obesity. All their bodily openings are channeled to their mouths . . . The people of the center are clever and sage-like and are good at government. The land there is suitable for grain and is full of cattle and sheep and the various domestic animals.[13]

This description of the world is mildly ethnocentric, of course, for it associates the Chinese and their land with the most positive characteristics of all. Earlier in the same chapter, the *Huainanzi* makes a similar claim: "The central region produces many sages."[14] But one cannot deny that the text also balances other peoples' strengths and weaknesses with a degree of evenhandedness and symmetry. Certainly precocity and courage are values that the Chinese esteemed, and even the steppe nomads of the north are credited with unusual longevity despite their purported lack of intelligence.

Also worth noting is the strong likelihood that the *Huainanzi* is the earliest known Chinese text to use the concept of *qi* to explain differences between human populations.[15] Although the passage on people of the east, south, west, north, and center does not explicitly link the differences between them to *qi*, another passage does identify the *qi* of various different terrains, climates, and soils as the causes of gender imbalances, physical ailments, increased physical strength or longevity, and moral characteristics like "humaneness" (*ren*) and "avarice" (*tan*).[16] A chapter in the *Guanzi*, a text that (like the *Liji*) consists of chapters of varying age from the late Warring States to the Han, links the physical, moral, and intellectual capacities of people in different Chinese geographical regions not to their *qi* but to differences in the purity of the water in their rivers, on the grounds that water is "the blood and *qi* of Earth." Although it has been suggested that one of the authors of the *Huainanzi* wrote this particular chapter of the *Guanzi*, the environmental determinism of the two texts is quite different.[17] In the long run, it was the *qi* model found in the *Huainanzi*, not the water theory in the *Guanzi* that had a lasting impact on Chinese thought. As both Dikötter and Pines have noted, for example, Zheng Xuan's second-century CE commentary to the *Liji* interprets the differences in "bodily capacities" and "innate nature" described in the "Wangzhi" as resulting from differences in "territorial *qi*" (*diqi*, literally "the *qi* of the land," or "the *qi* of the earth").[18]

The idea of *qi* as consisting of two opposite but complementary modes—yin and yang—became established at some point in the Han dynasty,[19] but the fact that neither the *Huainanzi* nor the *Guanzi* is regarded as a Confucian text should lead us to question Dikötter's suggestion that "Yin and Yang Confucianism is perhaps at the origin of a [Chinese] belief in environmental determinism that contributed to the dehumanization of the alien." Indeed, Dikötter cited the *Huainanzi*, which he called a Daoist work, as evidence that the ancient Chinese associated foreign peoples with physical abnormality, but was unaware of its use of the *qi* concept because he had only looked at somewhat inaccurate translations of the sections on the western and northern peoples in an article by Ruth Meserve and had not consulted the *Huainanzi* text itself.[20] In recent years, moreover, there has been a growing consensus among Western scholars that labels like 'Confucian' and 'Daoist' are not very useful to the study of early Han

texts, as they obscure the considerable intellectual eclecticism and diversity of the time.[21] The environmental determinism of the *Liji*, the *Huananzi*, and also the *Guanzi* should therefore not be classified as the product of any single philosophical 'school.'

The *Bohu tongyi* and the *Hanshu*

Not long after the *Huainanzi* was written, the imperial court of Han Wudi (r. 141–87 BCE) initiated a long war with the Xiongnu and also began expanding in various directions by conquering neighboring polities on the Korean peninsula, on the south Chinese coast, and in Yunnan. Wudi's armies colonized the island of Hainan, as well as the Gansu Corridor between the Gobi Desert and the Tibetan Plateau, and made two expeditions across the Taklamakan Desert to attack the Central Asian kingdom of Ferghana. Wudi's wars exhausted the Han government's financial resources rather quickly and thereafter had to be funded through state monopolies imposed on the sale of salt, iron, and wine. It was in the context of this new expansionism that the inferiority and otherness of foreign peoples and the inhospitability of their lands became a trope in Han political rhetoric, used by concerned officials in attempts to persuade Wudi and later Han emperors not to waste Chinese lives and resources on seemingly endless frontier wars.[22] One of the most representative examples is a memorial of 48 BCE with which Jia Juanzhi (d. 43 BCE) successfully persuaded Han Yuandi (r. 49–33 BCE) to abandon Hainan rather than continue sending troops in to quell incessant revolts by the native population. Jia argued that the sage-kings of antiquity had never concerned themselves with territorial expansion; he also claimed that the bizarre customs of the Hainanese made them "no different from birds and beasts" and "similar to fish and turtles," hardly worth keeping in the Han empire.[23] These twin strategies of crediting the sage-kings with a non-expansionist policy and denying the value (and, in many cases, the humanity) of the peoples who were objects of Chinese imperial aggression remained mainstays of Chinese anti-expansionist rhetoric for centuries to come.

The schemas seen in the *Liji* and *Huainanzi* are interested in dividing the peoples of the world into five groups, comprising the Chinese in the center and the peoples surrounding them on each of four sides. The four groups of foreign peoples are as different from each other as they were from the Chinese and are not inherently inferior: in the *Liji*, each group is simply well adapted to living in a different environment, whereas in the *Huainanzi*, each group was superior to the Chinese in one aspect and inferior in another. The earliest Han examples of anti-expansionist rhetoric, including Jia Juanzhi's memorial, also denigrate specific peoples like the Hainanese and the Xiongnu but make no generalizations about 'barbarians' as a category. By the last decades of the first century CE, however, Han scholars and officials were framing their anti-expansionist rhetoric around the idea of a dichotomy between the Chinese and 'barbarians' in which the latter were defined by permanent moral inferiority. They were also increasingly prone to justifying such rhetoric by quoting (or misquoting) the 'Confucian' Classics, reflecting the rising prestige of these texts since the first century BCE.

We can see the beginnings of this trend in the *Bohu tongyi*, Ban Gu's (32–92 CE) record of the proceedings of an important conference of Han *Ru* ('Confucian') scholars at the White Tiger Hall in 79 CE. A passage explaining the normative limits of a Han emperor's sovereignty states that a "true king" (i.e., an ideal ruler) should not under any circumstances consider three categories of people to be his subjects, these being the officially designated heirs of the Shang dynasty (c. 1600–c. 1046 BCE) and Zhou dynasty kings; the parents of the empress, and the "barbarians" (Yi-Di). On the last of these categories, we read:

> The lands of the barbarians (Yi-Di) are cut off from the Central Lands, and their customs are different. They are not born from balanced and harmonious *qi* and cannot be transformed by ritual propriety and moral duty. That is why [a true king] does not consider them his subjects. The [Gongyang] commentary to the *Chunqiu* annals says, "When barbarians (Yi-Di) deceive one another, a morally superior man does not abhor it." The Great Commentary to the *Book of Documents* says, "Those who have not been given the standard [Chinese] calendar [as a symbol of suzerainty], a morally superior ruler does not consider his subjects."[24]

This passage is the first known attempt at identifying an ideological basis for regarding the present boundaries of the Chinese empire to be both conterminous with the classical geopolitical concept of the Central Lands and exclusive of the opposite category, 'barbarians.' The *Xiaojing gouming jue*, a slightly earlier text quoted elsewhere in the *Bohu tongyi*, had already identified these three categories of non-subjects. But its explanation for the third category was that the Son of Heaven "does not consider the rulers of the barbarians (Yi-Di) as his subjects because they have not been granted his governance and teaching; out of modesty, he does not consider them his subjects."[25] This places the responsibility for the barbarians' non-subject status on the emperor's inability to extend his governance to them—a practical limitation that was conditional rather than absolute. In contrast, the *Bohu tongyi* cites geographical separation, cultural difference, and most importantly, the barbarians' inborn moral inferiority and inability to be transformed (originating from their imbalanced *qi*) as reasons why even the most powerful ruler should never try to make good subjects out of them.

Clearly, this argument's implications were not solely academic. In the years leading up to the White Tiger Hall conference, the leading ministers of the Han court were divided over the question of whether to reestablish the protectorate over the western oasis states of the Turpan-Hami, Tarim, and Dzungarian basins, which had begun between 68 BCE and 59 BCE and ended in 16–23 CE.[26] These desert areas, which the Han and subsequent dynasties knew as the Western Regions, were now under the suzerainty of the Northern Xiongnu.[27] Han troops returned to the Western Regions, drove the Northern Xiongnu out, and established a new protectorate in 73 CE, but were ordered to pull out three years later under pressure from a fierce Xiongnu counterattack.[28] Although the *Bohu tongyi* makes no reference to these recent events, it may not be a coincidence that Yang Zhong (d. 100 CE), the minister who had convinced the newly enthroned Han Zhangdi (r. 75–88 CE) to abandon the Western Regions protectorate in 76 CE also mooted the idea of the White Tiger Hall conference in 79 CE.[29]

Although we cannot assume that every *Ru* scholar at the conference shared Yang Zhong's anti-expansionist inclinations, we can be reasonably certain that Ban Gu himself did. This is because Ban expresses very similar inclinations in his history of the 'Western' Han dynasty (206 BCE–9 CE), the *Hanshu*, most of which he completed around the same time as the *Bohu tongyi*. The chapter of the *Hanshu* dedicated to the history of the Western Regions ends with an Appraisal (*zan*) that argues strongly against westward expansion, using the reign of Han Wudi as a cautionary tale of the high cost in blood and treasure it would entail.[30] The Appraisal also praises Zhangdi's decision to withdraw Han forces from the Western Regions as both a correct response to the needs of the time and a wise policy worthy of the sage-kings of antiquity. It cites, approvingly, three earlier Han scholars who had supposedly identified the Pamir Mountains and the White Dragon Dunes (on the western and eastern edges of the Tarim Basin respectively) as topographical barriers "by which heaven and earth have set boundaries between different regions of the world and cut off those outside from those inside."[31] Ban Gu's Appraisal for the *Hanshu* chapter on the Xiongnu contains a similar anti-expansionist

argument that interprets the mountains, valleys, and deserts on the northern and northwestern edges of the Han empire as "that by which heaven and earth have cut off those outside from those inside."[32]

In these passages, we see the beginning of another popular anti-expansionist rhetorical strategy that asserted the permanent otherness and 'outerness' of 'barbarians' in terms of geographical features and physiographic divisions, rather than *qi*. According to such rhetoric, the mountains, deserts, and seas that presented barriers to Chinese expansion had been placed there by Heaven for the precise purpose of marking the permanent boundary between Chinese and barbarians. To attempt to overcome these obstacles was thus a violation of Heaven's will. Ban's Xiongnu chapter Appraisal goes on to claim that the sage-kings understood this principle and therefore refrained from attempts at conquering barbarians:

> The land [of the barbarians] cannot be ploughed to grow food, and their people cannot be cultivated as imperial subjects. That is why [the sage-kings] treated them as those outside and not those inside, keeping them far off and not letting them come close. They neither granted these people their governance and teaching, nor granted their country the standard [Chinese] calendar. They punished and repelled them when they came [to invade], and [merely] guarded and defended against them after they fled.[33]

The Xiongnu chapter Appraisal also invokes the 'Confucian' Classics' authority for its inside-outside dichotomy by quoting the Gongyang commentary's claim that Confucius, when writing the *Chunqiu* annals, "regarded the Chinese states as those inside and the barbarians (Yi-Di) as those outside." But Ban's rhetoric deliberately misreads the context of the relevant line from the commentary. The Gongyang commentator argued that when Confucius wrote the *Chunqiu* annals, he

> . . . regarded his home state [of Lu] as the inside and the [other] Chinese states as those outside [when speaking of interstate relations], but regarded the Chinese states as those inside and the barbarians (Yi-Di) as those outside [when speaking of relations between the Chinese states and the barbarians].

To the commentator, this formulation raised a question: "A true king would wish to unify all under heaven, so why speak in terms of outside and inside?" The commentator himself then supplied the answer: "This means that he begins [the unification] from the places closer to him." The logical conclusion from this answer would be that any imperial dynasty that achieved the unification of the Chinese world should go on to conquer the barbarians beyond it.[34] In fact, the *Hanshu* itself records that two high-ranking Han ministers had used a very similar formulation in 52 BCE to advocate formally incorporating a submitting faction of the Xiongnu into the Han empire: "The institutions of the sage-kings were such that in extending their moral power (*de*) and spreading [the practice of] ritual propriety, the capital came first and the Chinese states later, [after which] the Chinese states came first and the barbarians (Yi-Di) later."[35] By contrast, Ban Gu's decontextualized use of a part of the Gongyang commentary passage gives the inside-outside distinction between the Chinese and the barbarians a decidedly anti-expansionist meaning by ascribing it with a sense of permanence rather than one of priority or sequence.

As we have seen, the *Bohu tongyi* claims that barbarians "cannot be transformed by ritual propriety and moral duty." In another passage, this one on rites and music, we are told that

because "the barbarians (Yi-Di) are simple and not as refined as the Central Lands," they therefore "do not have ritual propriety and moral duty" and "are unable to practice the rites." For this reason, the "former sage-kings" created different styles of music and dance for the barbarians to perform as a means of enjoyment, but did not create proper rites for them.[36] The concepts of "ritual propriety" (*li*) and "moral duty" (*yi*) were central to *Ru* understandings of morality. They also became central to discourses on the barbarians in this period, when foreign policy rhetoric at the Han court was increasingly *Ru* in tenor, and thus effectively served as a way of defining Chinese identity in *Ru* terms. *Li* literally means "rites" or "ceremonies," but the *Ru* concept encompasses an entire way of relating to others, and a concern with the spirit and attitude with which rites are performed, that corresponds closely to the Western idea of "civility." *Yi*, often translated as 'righteousness' or 'rightness,' conveys the idea of doing what one knows is right and moral in every particular situation, even when it is unprofitable or even costly to oneself—hence my choice of "moral duty" as a translation. The *Ru* held that a morally superior man (*junzi*) will choose moral duty over personal gain when the two are in conflict, whereas a morally inferior man (*xiaoren*) will most likely do the opposite and show himself to be self-seeking and untrustworthy. To a large extent, Han *Ru* discourse on the moral inferiority of barbarians simply applied the *junzi-xiaoren* moral dichotomy to the difference between the Chinese and the barbarians. However, whereas Chinese *xiaoren* were seen as morally reformable through education, barbarians were not usually credited with the same potential.

Ban Gu did make an exception for one type of 'barbarian': the people of the Korean peninsula, the northern part of which had been under continuous Chinese rule since being conquered by Han Wudi in 108 BCE. According to a legend circulating among the Chinese by the time of that conquest, the Korean kingdom of Joseon (Chaoxian) that fell to Wudi's armies had itself been founded some nine centuries before by a Shang dynasty aristocrat, named Jizi, who had moved to the Korean peninsula after the end of the Shang.[37] In the *Hanshu* "Treatise on Geography," Ban Gu credits the "transforming influence of a humane worthy," namely Jizi, for the superior (i.e., more Chinese) customs practiced by the indigenous Korean people under Han rule. According to Ban, Jizi had "taught the [Joseon] people ritual propriety and moral duty," as well as the practice of agriculture, sericulture, and weaving. But Ban also felt a need to maintain that other 'barbarians' did not have the same potential for learning morality and Chinese ways of life, commenting: "The eastern Yi have an innate nature that is gentle and submissive, unlike [the barbarians] in the three other quarters [of the world]."[38]

Ban Gu found evidence for the Koreans' exceptional moral potential in two rather surprising passages in the *Analects*: one (9:13) where Confucius expresses interest in going to live among the "nine kinds of Yi" despite the common perception of the Yi as "crude" (*lou*), and another (5:7) in which he expresses a desire to go to sea on a raft, out of despair at the moral degeneracy of Chinese society in his time.[39] Ban Gu conflates the two passages, inferring that Confucius was speaking of traveling to the eastern Yi of the Korean peninsula by sea and furthering their moral improvement on the foundations that Jizi had already laid down. This conflation obscures the fact that the people whom the Chinese of Confucius' day knew as 'eastern Yi' were not Koreans, but rather peoples indigenous to the eastern and southeastern fringes of the North China Plain: the Shandong peninsula and the Huai River region. By Han times, these peoples had ceased to be regarded as distinct from the Chinese, and the category of 'eastern Yi' had shifted to the Chinese world's new eastern frontier in Korea, where it remained for about two millennia, with just one significant expansion to incorporate the people of Japan.

The *Zhoushu*

Let us turn to the Tang dynasty, starting with the *Zhoushu*, one of several official histories of preceding dynasties that were commissioned by the Tang imperial court and completed in 636 CE. In the first of two Discourses (*lun*) for an ethnographic chapter on foreign lands (*yiyu*), the assistant editor of the *Zhoushu*, Cen Wenben (595–645 CE), describes the difference between Chinese and barbarians in the following terms:[40]

> All human beings are formed in the image of heaven and earth and receive their intelligence from a combination of yin and yang [*qi*]. Their foolishness and wisdom are based on the natural order, and their hardness and softness are tied to the water and the soil. Therefore those lands where rain and dew are plentiful and the winds circulate freely, that are crisscrossed by the nine rivers and bounded by the five mounts—these are called the Chinese states.[41] From the people born in these lands come humaneness and moral duty.
>
> The Dark Valley [in the far west], the Yi of the seacoast [in the far east], Guzhu [in the far north], and [the land in the far south] where doors face northwards [toward the sun]—these are separated from us by the red border [in the south], the purple wall [in the north], the cerulean sea [in the east], and the joined rivers [in the west], and are called the remote lands.[42] In people affected by the *qi* of such lands, a malevolent character is formed.
>
> As for the nine kinds of Yi and eight kinds of Di, their clans and divisions have proliferated in great number, and the seven kinds of Rong and six kinds of Man fill up our frontiers. Although their customs vary from place to place and their desires are different, when it comes to being greedy and insatiable, cruel and fond of rebellion, defiant when strong and submissive when weak, the principle [that defines them] is one and the same. Heaven must have decreed that this should be so![43]

Cen Wenben's explanation for the barbarians' moral inferiority consciously builds on the environmental determinism of the "Wangzhi," the *Huainanzi*, and the *Bohu tongyi*, as well as the rhetoric of physiographic boundaries in the *Hanshu*. Cen has also borrowed terms and concepts from two other early Chinese texts: the "Yaodian" chapter of the *Book of Documents* and the dictionary *Erya*.[44] According to the "Yaodian" chapter, the Sunrise Valley—where the Yi of the seacoast dwelt—and the Dark Valley were locations where the ancient sage-king Yao had stationed officials to observe the rising and setting of the sun respectively.[45] The authors of the *Huainanzi* believed that the sun literally rose out of the Sunrise Valley and descended into the Dark Valley, making these the eastern and western boundaries of that part of the world that was lit by the sun.[46] The land of Guzhu, the land where doors faced northwards toward the sun (what we would understand as the southern hemisphere), and the notion of thirty different kinds of barbarian all appear in the same passage of the *Erya*:

> Guzhu, [the land] where doors face northwards [toward the sun], the [land of the] Queen Mother of the West, and the [land] under the [rising] sun are called the four remote lands. The nine kinds of Yi, eight kinds of Di, seven kinds of Rong, and six kinds of Man are called the [people of the] four seas.

This passage identifies the edges of the known world and their inhabitants, but does not ascribe any negative characteristics to them. In fact, it goes on to describe the people of the land of

Taiping (Great Peace)—where the sun rises—as humane (*ren*), the people of Taimeng (Great Darkness)—the land where the sun sets—as trustworthy (*xin*), and the people of the far southern land of Danxue (Cinnabar Cavern) as intelligent (*zhi*). The people of the far northern land of Kongtong (Hollow Cavern) are described as "martial" (*wu*), but without any connotation of cruelty or other such moral defects.[47]

It thus seems clear that the image of barbarian inferiority and otherness in Cen Wenben's Discourse is not from the "Wangzhi," the "Yaodian," the *Erya*, or the *Huainanzi*. Rather, it comes from the *Bohu tongyi* and the *Hanshu*. The reason for Cen's use of this image becomes evident when we turn to his preface (*xu*) to the *Zhoushu* chapter on foreign lands, which is explicitly anti-expansionist. The preface contains a scathing criticism of the Sui emperor Yangdi (r. 604–18 CE), whose three unsuccessful invasions of the Korean kingdom of Goguryeo in 612–14 had imposed intolerable burdens of taxation and conscription on the populace, triggering the wave of rebellions that finally destroyed his empire and led to its replacement by the Tang dynasty.[48] Cen obliquely likens Sui Yangdi to Han Wudi and the First Qin Emperor (r. 221–210 BCE), whose wars of territorial expansion against the Xiongnu and the southern Yue peoples were often blamed for the rebellions that caused the fall of the Qin Empire:[49]

> The [First] Qin Emperor ruled all under heaven by force and recklessly used military power against distant lands; Han Wudi, with his great strength in soldiers and horses, indulged himself in conquering faraway places. By the time the Xiongnu retreated, [these two emperors'] own realms were drained of their wealth; by the time the heavenly horses [of Ferghana] arrived [at the Han court], [Wudi's] own people were exhausted and impoverished.[50]
>
> From this we know that the Wild Goose Sea and the White Dragon Dunes are that by which Heaven has cut the barbarians (Yi) off from the Chinese, and that the fiery regions [of the south] and the northern desert are that by which the earth has set boundaries between those inside and those outside.[51] How much more so in the case of [a ruler whose] time was not that of the Qin and Han, but whose ambitions exceeded those of the First Emperor and Wudi? He sought achievements in going against the Way of Heaven, expending all the strength of the people in indulging his desires. Hence the disaster of his empire's collapse came in less time than it takes one to turn on one's heels.
>
> Thus when the sage-kings set down their teachings, they regarded the Chinese states as those inside and the barbarians (Yi-Di) as those outside, and when the wise men of the past handed down their models, they praised the establishment of moral power (*de*) and denigrated territorial expansion. Even when the journeys of [the sage-king] Yu extended into the east and west, he did not cross the sea and the shifting sands, and even when the regulations of the [Zhou] kings extended from north to south, it excluded the cave-dwelling [Di] and the pigeon-toed [Man]. Is this not the Way that runs through remote antiquity, and a truth whose validity has endured for a hundred ages?[52]

Like Ban Gu, Cen Wenben was not above manipulating the language of the Classics to make points contrary to their original intent. The "Wangzhi" chapter credits the early Zhou kings with the wisdom needed to rule cave-dwelling and pigeon-toed foreign peoples without having to change their ways of life; Cen Wenben, however, changes their wisdom to one of not trying to rule the barbarians at all. Similarly, when the author of the "Yugong" chapter of the *Book of Documents* praised the sage-king Yu's authority as "extending eastward to the sea and

westward to the shifting sands," he understood these to be the furthest reaches of the known world.[53] But since the known world of the Tang period stretched from Japan in the east to the Byzantine Empire in the west, Cen Wenben could now claim, with a great deal of anachronism, that Yu's territorial ambitions were really quite modest.

Indeed, Cen Wenben's preface and first Discourse for this chapter of the *Zhoushu* are the earliest known Chinese attempts at representing an idealized world in which the Central Lands are (in Jonathan Karam Skaff's words) "a 'culture island' surrounded by geographical barriers" on every side, although Ban Gu's rhetoric about the White Dragon Dunes and the Pamirs in the west had already laid a foundation for this ideal. Skaff points to later Tang examples of this discourse and notes correctly that "these physical obstructions were far more permeable than the rhetoric would suggest." But we should therefore be wary of assuming that users of the discourse were unaware of the discourse's "weak basis in reality" (as Skaff puts it), since they were actually trying to construct a classical ideal for the sake of criticizing a current reality of frontier expansion.[54] It was precisely because the barriers had proven to be so permeable for Chinese armies that anti-expansionists felt compelled to warn of the dangers inherent in breaching them.

Cen Wenben's anti-expansionist rhetoric of barbarian moral inferiority and otherness stands in sharp contrast to the Discourse for an ethnographic chapter on the "eastern Yi" in the exactly contemporaneous *Suishu*, an official history of the Sui dynasty. Wei Zheng (580–643), the chief editor of the *Suishu* and the probable author of the Discourse, repeats Ban Gu's claims that the eastern Yi of the Korean peninsula "are by their innate nature gentle and submissive, without a spirit of ferocity and violence," and that Jizi's "transforming influence" has made them culturally very similar to the Chinese. Wei also claims: "Although they live far away among the mountains and seas, they are easily controlled by means of the Way." This echoes the chapter on the eastern Yi in the *Hou Hanshu*, a fifth-century sequel to the *Hanshu* that in turn builds on Ban Gu's representation of the Koreans. Wei Zheng's reason for elevating the Koreans in this way becomes evident later in the Discourse, when he argues that Sui Yangdi should have gained Goguryeo's submission through "culture (*wen*) and moral power (*de*)" (an allusion to *Analects* 16:1) instead of resorting to war.[55] Whereas Cen Wenben's Discourse implies that all barbarians are morally too different and geographically too distant from the Chinese to be worth conquering, Wei Zheng seems to be asserting that the Koreans, at least, are similar enough to the Chinese to be won over with moral influence. Invading Goguryeo was therefore both unnecessary and counter-productive.

Cen Wenben and Wei Zheng thus adopted opposite strategies to convey the same message against expansionist warfare. This message carried exceptional weight for both men, who had spent their formative years witnessing the Sui Empire's brief glory and its swift and chaotic disintegration. Just as late Han anti-expansionists were anxious to prevent their emperors from repeating what they believed to be Han Wudi's costly mistakes, early Tang anti-expansionists were mindful of the consequences of Sui Yangdi's Goguryeo invasions and keen to warn against taking similar risks.[56] To that end, they naturally looked to Han anti-expansionist arguments for inspiration, especially those in the *Hanshu*. But as we see in the cases of the *Zhoushu* and the *Suishu*, the rhetorical resources that they found in Han texts could result in highly contrasting arguments.

The *Tongdian*

The *Zhoushu* is the earliest Tang example of environmental determinism with regard to the Chinese-barbarian dichotomy. The latest such example, and probably the most widely known,

is found in Du You's massive encyclopedia of institutional history, the *Tongdian*, which was presented to the throne in 801. The preface to the section on foreign countries and foreign relations (somewhat misleadingly titled "Frontier Defense," *bianfang*) contains a passage that uses an innovative ethnological approach to refute the primitivist philosophy of the 'Daoist' classic, *Laozi daodejing*.[57] Whereas the *Bohu tongyi* and the *Zhoushu* attributed the Chinese people's cultural and moral superiority to the superior, more balanced *qi* of their natural environment, Du You did not assume that superior *qi* automatically resulted in cultural and moral superiority. Instead, he argued that this happened gradually, as the good *qi* of the Central Lands periodically produced sages who taught the ancient Chinese to adopt more civilized practices:

> Within the space that lies between [heaven and earth] and is illuminated by the sun and moon, [the land of] the Chinese lies at the world's center, and its living beings receive correctly balanced *qi*. Its people are harmonious by nature and intelligent in their mental faculties, and the products of its soil are abundant and diverse. Therefore it has given birth to sages and worthy men who, one after another, have dispensed laws and teachings. According to the needs of the times, they have remedied the ills of society and put each thing to its fullest and most beneficial use. Since the time of the sage-kings, every age has had such men . . .
>
> A worthy man of the past[58] said, "When the Way was lost, only then was there a need for moral power (*de*); when moral power was lost, only then was there a need for humaneness (*ren*); when humaneness was lost, only then was there a need for moral duty (*yi*); when moral duty was lost, only then was there a need for ritual propriety (*li*)." This can truly be called slicing the thick to make it thin and diluting strong wine to make it weak. He also said, "In antiquity, people [of neighboring communities] died of old age without ever having had anything to do with one another. They neither communicated nor competed with one another, because each person was self-sufficient." He said this because he despised the decadent artifice of his time and admired the honest simplicity of the past, and thus wished to encourage people to emulate [the ancient ways].
>
> However, it is the normal tendency of people to denigrate the present age and praise the ancient past. The simple and peaceful society of the ancients is praiseworthy indeed, but might it not also have had inferior ways and uncouth customs? If we look back to the Central Lands of the Chinese in antiquity, it was in many ways similar to the barbarians of today. There were practices of living in trees and caves, of burying the dead in unmarked graves, of eating with one's hands, and of making ancestral offerings to a personator.[59] For now, I have only given one or two such examples, and cannot list them exhaustively.[60]

By noting the similarities between practices still found among 'barbarian' peoples and various now-defunct Chinese practices mentioned in the Classics, Du You argued that the Chinese would still be living just like barbarians if not for the sage-kings who had replaced these practices with more civilized ways. A primeval "state of nature" was therefore no different from barbarism and could not be superior to life in a society governed by the sages' "laws and teachings."

Du You's commentarial notes to this passage, probably written between 771 and 801, show that he believed the civilizing process that produced Chinese civilization began in the time of the sage-kings but was not fully complete until the time of the Qin and Han empires, when the custom of personators disappeared. These notes also show that he had been collecting and comparing ethnographic data about the customs of peoples on the Tang empire's frontiers.

Thus, although the central portion of this passage is framed as a rebuttal to the *Laozi daodejing*, it is very likely that this was just a 'straw man' device for him to present a theory about the origins of civilization that he had been constructing for some time. After all, no one at the Tang imperial court in Du You's day was advocating that the ideas of the *Laozi daodejing* be put into practice in a literal fashion that involved rejecting the 'Confucian' values of moral power, humaneness, ritual propriety, and moral duty.

Du You's theory raises a question: if the barbarians' inability to advance beyond "inferior ways and uncouth customs" stemmed from their not having produced sages and worthy men of their own, why had the Chinese sages and worthy men not seen fit to conquer or at least visit them in order to spread the benefits of ritual propriety and moral duty? It could even be argued that Jizi had already done this with the Koreans, with impressive results, and that Confucius had at least expressed an interest in carrying on Jizi's work. Rather than make his ethnological theory the basis for a Chinese civilizing mission, however, Du You concurs with the *Bohu tongyi* that the barbarians are not just untaught in the ways of civilization, but also inherently *unteachable* because of their poor *qi* endowment:

> The lands [of the barbarians] are peripheral and their *qi* is blocked up. They do not produce sages and men of wisdom, and therefore have not changed their old ways. Admonition and teaching have no effect on them, and ritual propriety and moral duty cannot be spread to them.[61] We should treat them as those outside and not those inside, keeping them far off and not letting them come close. When they come [to invade], we should repel them,[62] and after they flee, we should [merely] guard against them. Perspicacious men of former times have already written on this in great detail.[63]

Borrowing from Ban Gu's rhetoric in the *Hanshu*, Du thus identifies the barbarians' innate, permanent inferiority as the basis for a defensive, non-expansionist frontier policy.

Du You's "Frontier Defense" preface has attracted the attention of numerous modern scholars, as it postulates what appears to be a universal model of human sociocultural evolution. Its claim that the Chinese of ancient times were "in many ways similar to the barbarians of today" also invites comparison with the famous Archaeology at the beginning of Thucydides' *Peloponnesian War*, which makes a similar claim with regard to the Greeks of earlier times. However, the importance of *qi* to Du You's model has hitherto tended to be overlooked or misunderstood. E.G. Pulleyblank's claim that Du You was being more "Legalist" than "Confucian" by "substituting an environmental explanation for the element of magic or mystique in the sages" would seem to be overstated. As we have seen, environmental explanations for the supposed superiority of the Chinese had a precedent in the 'Confucian' *Bohu tongyi*, and Du You's only innovation lay in directly linking such an explanation with the widely held perception of the sage-kings as the creators of human civilization.[64] David McMullen has argued, on the basis of the prefaces for the sections "Frontier Defense" and "Punishments and Laws," that Du You emphasized Chinese civilization's evolution from primitive, barbaric origins in order to legitimate institutional reform and justify the use of criminal law in his own day.[65] This may be true of the "Punishments and Laws" preface, which quotes a long passage from Ban Gu's *Hanshu* "Treatise on Punishments and Laws," arguing that states and laws originated from human beings' need to form groups for survival in a harsh, dangerous natural environment. But it is clearly not the context for the "Frontier Defense" preface, which uses Ban Gu for a different, anti-expansionist purpose.

That anti-expansionist intent is clear from the lines that follow Du You's statement about "perspicacious men of former times." Du claims: "In history, the excessive display and use of

military power in attacking barbarians (Rong-Yi) began with the Qin dynasty, but its disastrous effects have been seen in every age." He then cites as examples the collapse or near-collapse of the empires of the First Qin Emperor, Han Wudi, Sui Yangdi, and also Wang Mang (r. 9–23 CE), who attempted to launch a large expedition against the Xiongnu soon after supplanting the Han dynasty. By contrast, Du You hails Guangwudi (r. 25–57 CE), who reestablished the Han following Wang Mang's downfall, as a model of "knowing how to be content," because he rejected his generals' proposal for an expedition against the Xiongnu.[66]

Du You ends the preface with more recent history, condemning the wars that the Tang Empire waged on four different frontiers (western, northeastern, northwestern, and southwestern) in the early 750s. He blames these wars, which cost the lives of tens of thousands of Tang soldiers, on "frontier generals [who] courted the emperor's favor by vying to launch offensive expeditions," and suggests that the An Lushan Rebellion of 755–63, which began when one of these generals attempted to overthrow the imperial court, actually averted the Tang dynasty's complete self-destruction: "If the Youzhou rebels [under An Lushan] had not turned against the imperial court, wars would have continued without pause on every frontier under heaven, and the scale of [the empire's] collapse would then have been immeasurable!"[67] This was a bold claim indeed, given that the Tang dynasty had only narrowly survived An Lushan's revolt and was still living with its strategic consequences: most notably, the loss of the western and northwestern frontiers, including the Western Regions and the Gansu Corridor, to the Tibetan empire due to the diversion of armies eastward to fight the rebels. Since the Tang was no longer in a position to pursue territorial expansion at this time, why did Du You feel it necessary to convey an anti-expansionist message to the most important audience for the *Tongdian*, the emperor himself? I would suggest that Du assumed that the territorial losses to the Tibetans were only a temporary setback, and that the Tang Empire would eventually return to the frontiers of the 750s and face the perennial temptation to continue expanding. Hence the concluding sentence of his preface, which uses two classical metaphors (the tortoise shell used for divination, and the mirror) to assert that the lessons of history should serve to guide policy-making in the present and future.

Conclusion

Historians of imperial China have often taken the appearance of denigrating or 'othering' rhetoric about barbarians in an anti-expansionist argument as evidence that its author's anti-expansionism was based on an ethnocentric, insular, or xenophobic worldview that could not conceive of foreign peoples as fundamentally similar to themselves, let alone as potential members of a Chinese-ruled empire. For example, Pan Yihong has argued that in spite of the "open, cosmopolitan air" of the Tang Empire

> . . . there were always many advocates of the inward-looking attitude, the attitude of "having all the Chinese within and keeping all the barbarians without" and drawing a clear line between the "civilized Middleland" and the "savage, useless" land of the "barbarians," and between the Chinese as "roots" and the non-Chinese as "branches and leaves."[68]

More ambivalently, a recent article by Peter Bol recognizes that late Tang and Song dynasty (960–1276 CE) anti-expansionists (including Du You) were concerned about the "tremendous human cost" and "self-destructive" nature of imperial expansion, but nonetheless concludes from their rhetoric about the superiority of the Central Lands that they "opposed an expansionist foreign

policy because they denied that historically different cultures could be harmoniously absorbed into a single polity."[69]

I do not think such interpretations take the uses and contexts of the relevant rhetoric sufficiently into account. I propose that if we consider the contents of each recorded anti-expansionist argument in its entirety, we will usually find that its author placed more emphasis on the practical problems associated with expansion—such as material and human costs, fiscal unsustainability, and the consequent risk of sociopolitical instability and upheaval—than on notions of the barbarians' innate inferiority and immutable otherness. Debates over expansion were thus primarily disagreements about the amount of investment an empire could afford to make on territorial expansion and other forms of frontier adventurism before the long-term costs outweighed the benefits. The idea of barbarian inferiority was only a strategically expedient aspect of such debates, rather than an ideological foundation or a determinative factor.

In modern contexts, rhetorical denigration and dehumanization of the enemy is commonly used to justify warfare and conquest, not to discourage it. As a result, even some of the most incisive and influential scholarship on imperial Chinese political rhetoric has mistakenly assumed derogatory representations of foreign peoples to be the sole preserve of arguments justifying their conquest or extermination.[70] But because Chinese imperial courts tended to justify territorial expansion with universalistic rhetoric about spreading a sagely emperor's transformative or civilizing influence beyond the Central Lands, denigrating or dehumanizing barbarians was also one of the few available arguments for delegitimizing an emperor's ambitions to conquer them or justifying withdrawal from conquered territory that had become too costly to hold.[71] Since it was ideologically unthinkable that foreign peoples might be better off ruling themselves and politically unwise to suggest that the emperor lacked the moral authority to extend his rule to them, the logical alternative was to argue that they were innately incapable of being improved by Chinese rule.

How strongly these anti-expansionists actually believed in Chinese moral superiority to foreign peoples is, in such cases, arguably beside the point. What matters is that they believed strongly that the Chinese should resist the temptation to prove their superiority through needless wars and annexations, lest the true basis of that superiority—that is, military strength, social order, and political stability—be squandered in the process. In contemporary English parlance, the only way for a country to extricate itself from an unsuccessful and costly military foray overseas without overt humiliation is to "declare victory and get out."[72] One could say that the equivalent strategy in imperial Chinese court rhetoric was to "declare moral superiority and get out" or, if a planned invasion had not yet begun, to "declare moral superiority and stay out."

A brief comparison with Aristotle, representative to some extent of classical Greek thought, may serve to demonstrate how unique the Chinese were in this. It is well known that Aristotle's *Politics* endorses the statement found in a play by Euripides that it is right and proper for Greeks to rule over barbarians. Aristotle does so by arguing that the former are characterized by freedom and the latter by slavishness. Later in the same text, he further asserts that the Greeks, being endowed with an ideal combination of courage and intelligence by virtue of their central geographical location (between 'Europe' and 'Asia'), would be well–suited to ruling over other peoples.[73] One can infer from this that the Chinese and some Greeks, both believing themselves to be situated in the center of the world and thus endowed by the influence of their environment with the best moral, intellectual, and cultural capacities, developed very different ways of interpreting the implications that such a self-perception had for their relations with the "barbarians." Whether these interpretations can be described as

either "proto-racism" (in Isaac's terms) or an "embryonic form" of racialism (in Dikötter's), is a question of semantics that might be best left for others to answer. I would, however, like to bring a fresh perspective to the issue by commenting on an argument that the Taiwanese political scientist Chang Chishen presented in his recent doctoral dissertation.[74]

Chang Chishen builds on an influential theory that originated in the 1970s, when Rolf Trauzettel and Hoyt Tillman argued for the existence of a form of Chinese 'proto-nationalism' in the Southern Song period (1127–1276 CE). Tillman, in particular, noted how Chen Liang (1143–94 CE) used the idea of differences between "correctly balanced" Chinese *qi* and "imbalanced" barbarian *qi* to justify irredentist warfare against the Jurchen people, who had invaded and conquered north China in 1127 CE.[75] Chang Chishen expands Tillman's thesis by arguing that a mainstream 'culturalist' discourse on the Chinese-barbarian dichotomy prevailed throughout the Tang and Northern Song (960–1127 CE) periods, but came under challenge during the Southern Song from a new discourse of "geographism" (*dili zhuyi*). Chang sees "geographism" as an interpretation of the Chinese-barbarian dichotomy based on the idea of innate and permanent differences in "territorial *qi*" (*diqi*). According to Chang, the "geographist" interpretation of Chinese identity denied the possibility of a foreign dynasty legitimately ruling even a part of the Chinese world, and thus eventually developed into a kind of "quasi-nationalism" (*leisi minzu zhuyi*). Openly disagreeing with Joseph Levenson's 'culturalism to nationalism thesis,' Chang argues that this "quasi-nationalism" was the direct precursor of the Chinese nationalism that developed in the late nineteenth and early twentieth centuries.[76]

As I have shown in this chapter, the idea that barbarians have inferior or imbalanced *qi* is already present in Han and Tang sources, so Chang Chishen is mistaken in identifying it as a radically new development in the Southern Song. The only truly new aspect of Southern Song environmental determinism was its use in irredentist, rather than anti-expansionist, arguments. In other words, Han and Tang environmental determinism was used for delegitimating Chinese rule over foreign lands, but Southern Song environmental determinism was used for delegitimating foreign rule over Chinese lands. Moreover, I would like to suggest that if some historians can identify pre-modern ideas of environmental determinism as "proto-racist" and others can call them "proto-nationalist" or "quasi-nationalist," it is likely that none of these categorizations is a good fit after all. Although looking for classical or medieval antecedents of modern ideologies like racism and nationalism may promise to infuse one's research with a sense of contemporary political relevance, in the end this pursuit may turn out to be too much of a distraction from the intellectual historian's primary mission of understanding past ideas on their own terms.

Notes

1 Isaac 2004.
2 In modern Chinese scholarship, the concept of culture is denoted by the neologism *wenhua*, the concept of race is denoted by the neologisms *zhongzu* and *xuetong*, and the concept of nation is denoted by the neologism *minzu*. There are no true equivalents to the concepts of race and nation in classical Chinese texts, while the classical terms that come closest to denoting an ethnic culture are *feng* and *su* (or the combination *fengsu*), now commonly translated as "customs."
3 Bergeton 2013, 182–90.
4 For insightful summations and critiques of Levenson's theory, see Townsend 1992; Duara 1996, 56–61; Yao 2002.
5 Leibold 2007.
6 Qian Mu repeated this argument in a lecture delivered in 1959, claiming that culture was the basis of Chinese identity throughout pre-modern history; he further argued that this was both unique to China

and a precursor of a future global trend of post-racial thinking: Chen 1994 [1943], 19–20; Qian 1988 [1948], 35; Qian 1989 [1959], 5–7, 77–9.

7 Dikötter 1992, 2–3.

8 Dikötter 1992, 1, 8. Dikötter did not consult the actual writings of either man and instead drew on passing mentions that other historians had made of their "environmental theories." Later in the chapter, he also mentioned the environmental determinism of Chen Liang (1143–94) and Wang Fuzhi (1619–92), both of whom lived long after the Tang.

9 Pines 2004, 79–81, 90–91.

10 Zheng 1999, 12.398–9. All translations from Chinese are mine unless otherwise noted.

11 Bergeton 2006, 18–43.

12 Riegel 1993, 295.

13 I have followed the translation in Major *et al.* 2010, 164.

14 Major *et al.* 2010, 160.

15 Dikötter follows an outdated practice of translating *qi* as "fluid." The term has also been translated as "energy," "psychophysical stuff," and "material force," among others. Most scholars now prefer to leave it untranslated as there is no satisfactory equivalent in Western languages. Dikötter 1992, 7–8; see also the discussion of *qi* in the *Huainanzi* in Major *et al.* 2010, 883.

16 See Major *et al.* 2010, 160, where *ren* is translated as "human fellow-feeling" and *tan* as "covetousness."

17 W. Allyn Rickett trans., *Guanzi: Political, Economic, and Philosophical Essays from Early China, Volume Two* (Princeton, NJ: Princeton University Press, 1998), 100, 106–7. The attribution to an author of the *Huainanzi* is Rickett's theory. Note also that Rickett translates *qi* as "breath," whereas I leave it untranslated. On the textual history of the *Guanzi*, see also W. Allyn Rickett, "*Kuan tzu*," in Loewe ed., *Early Chinese Texts* (Princeton, NJ: Princeton University Press, 1993), 244–9.

18 Dikötter translates *diqi* as "earth fluid": Zheng 1999, 12.398; Dikötter 1992, 8; Pines 2004, 80–81.

19 Building on earlier scholarship, Michael Nylan recently pointed out that *qi* and yin-yang were originally separate concepts that fused together during the Han period, but "we still do not yet know precisely when and how" this happened: Nylan 2010, 398, 409.

20 Meserve's understanding of the *Huainanzi* was based on a German translation and commentary from 1917, while Dikötter's understanding of yin and yang was limited to a 1925 study by the German Sinologist Alfred Forke: Dikötter 1992, 6–8; Meserve 1982, 55–6.

21 See, e.g. the discussion of the debate over the intellectual affiliation of the *Huainanzi* in Major *et al.* 2010, 27–32.

22 For earlier Han examples of such rhetoric, see Hoshina 2007, 44–7.

23 Ban 1962, 64b.2830–34.

24 Ban 1994, 7.316, 318. The line quoted from the Gongyang commentary is actually followed by the typically convoluted explanation, "He shows his abhorrence by acting as if he does not abhor it": see He 1999, 23.505. The Great Commentary to the *Book of Documents* was lost during or after the Tang period; only fragmentary quotations have survived. A longer fragment containing the line quoted here can be found at Li 1994, 785.314; see also Hoshina 2007, 51 n. 16.

25 Only fragments of the *Xiaojing gouming jue* have survived; the relevant fragment in this case is preserved in a *Liji* commentary: see Zheng 1999, 36.1066.

26 On the date of the protectorate's establishment, see Liu 2002. On the end of the protectorate during Wang Mang's (45 BCE–23 CE) short-lived and ultimately disastrous usurpation of the imperial throne in 9–23 CE, see Ban 1962, 96b.3927, 99a.4146; Sun 2006.

27 The Xiongnu confederation was split into two by a succession dispute in 48 CE. The Southern Xiongnu submitted to Han suzerainty and were resettled on the Ordos plateau, while the Northern Xiongnu remained in control of the Mongolian steppe until driven into Central Asia by Han and Southern Xiongnu armies in 89 CE. See Fan 1965, 89.2941–4; also De Crespigny 2006, 1–9.

28 Fan 1965, 88.2909–10; De Crespigny 2006, 9–12.

29 Fan 1965, 48.1597–9.

30 Ban 1962, 96b.3928–9.

31 It should be noted that none of these three scholars actually spoke of the White Dragon Dunes or the Pamirs as heaven-ordained geographical boundaries for the Chinese state, but one of them, Yang Xiong (53 BCE–18 CE) did come quite close in his philosophical work *Fayan*, which contains the following assertion: "To the west of the [White] Dragon Dunes and to the north of the great (Gobi) desert are the bird[-like] barbarians (Yi) and beast[-like] barbarians; to burden the imperial armies with [establishing] commanderies [over them] is something the House of Han should not do."

Incidentally, Yang went on to praise Jia Juanzhi's anti-expansionist arguments for preventing the Han from "exchanging the [lives of] our clothed [people] for [creatures with] shells and scales"—an elegant paraphrase of Jia's "fish and turtles" argument. Yang Zhong in turn borrowed Yang Xiong's paraphrase for his own anti-expansionist rhetoric in 76 CE. See Ban 1962, 64.2777–85, 96b.3929, 3886–7; Yang 1987, 20.554–5 (cf. Ban 1962, 94.3816); Fan 1965, 48.1598.

32 Ban 1962, 94b.3834.

33 Ban 1962, 94b.3834.

34 Ban 1962, 94b.3834.; He 1999, 18.400–401. On the implications of the Gongyang commentary passage, see also Pines 2002, 108–9.

35 Ban 1962, 78.3282; see also Hoshina 2007, 41.

36 Ban 1994, 3.110–11.

37 Sima 1959, 38.1620.

38 Ban 1962, 28b.1658.

39 Ban 1962, 28b.1658.

40 According to Cen Wenben's biography in the *Jiu Tangshu*, it was he and not the primary editor Linghu Defen (582–666 CE) who wrote most of the Discourses in the *Zhoushu*. My analysis of this Discourse thus identifies him as the author as well, although the identification is only probable rather than certain. See Liu 1975, 70.2536.

41 The plural term "Chinese states" (*zhuxia*) originated in the Zhou dynasty, which was divided into numerous feudal states. Under the Han, Tang, and other centralized Chinese empires, this term was technically an anachronism but continued to be used because of its prestigious classical origins.

42 According to the *Gujin zhu* by Cui Bao (fl. 290–306 CE), the red border was thus named because red was the color cosmologically associated with the south, while the purple wall was the Qin-Han Great Wall, reputed to have been built from purplish soil. According to the *Hanshu* chapter on the Western Regions, the joined rivers were a pair of rivers that surrounded an ancient city in the Turpan-Hami Basin, hence its name "the City of the Joined Rivers" (*jiaohe cheng*). See Wang, Huang, and Cao 1999, 236; Ban 1962, 96b.3921.

43 Linghu 1971, 49.899.

44 The dates of composition of the "Yaodian" and *Erya* remain highly controversial, but a relatively late dating of the "Yaodian" to the third century BCE appears most plausible, while the *Erya* was probably compiled in its present form during the Han dynasty.

45 Kong 2000, 2.29–30.

46 The *Huainanzi* calls the Dark Valley *menggu*, whereas the "Yaodian" calls it *meigu*. Major *et al.* translate *menggu* as "Vale of Obscurity." See Major *et al.* 2010, 130–31.

47 Guo Pu's (276–324 CE) commentary to the *Erya* identifies "territorial *qi*" (*diqi*) as the cause of the differences between these foreign peoples. This explanation is likely to have been modeled on Zheng Xuan's commentary to the "Wangzhi": Zhou 2004, 93–4. On the Queen Mother of the West, see Major *et al.* 2010, 167.

48 Goguryeo had seized control of the Chinese-ruled commanderies in Korea and the Liaodong peninsula during the fourth century CE, when China was in a state of political fragmentation. One of the reasons for Yangdi's invasions was that Goguryeo's continued possession of these territories posed a problem for the Sui dynasty's claim to have reunified the Chinese empire.

49 The earliest examples of this argument are memorials by the Han officials Zhufu Yan (d. 126 BCE) and Zhuang An (also known as Yan An, n.d.): see Sima 1959, 112.2954, 2958; Ban 1962, 64a.2799–800, 64b.2811–12. Significantly, both memorials were aimed at dissuading Han Wudi from initiating wars of territorial expansion.

50 This is a reference to Wudi's two military expeditions against the Central Asian kingdom of Ferghana, which were aimed at acquiring that kingdom's famed but jealously guarded "heavenly horses." See Sima 1959, 123.3160, 3170, 3174–7.

51 The Wild Goose Sea (*yanhai*) was most probably Lake Baikal, also known to the ancient Chinese as the Northern Sea (*beihai*) or the Vast Sea (*hanhai*). The reference to wild geese may be an allusion to the story of the Han envoy Su Wu (c. 142–60 BCE), whom the Xiongnu kept under detention on the shores of Lake Baikal for many years: see Ban 1962, 54.2466. "Fiery regions" is a reference to the Chinese cosmological practice of associating the south with fire and the color red, probably because of the heat and humidity of the tropics. The "northern desert" is the Gobi.

52 Linghu 1971, 49.883.

53 In the *Hanshu* "Treatise on Geography," Ban Gu identified the "shifting sands" of the "Yugong" chapter as the Juyan Lake, now also known by the Mongolian name Gashun Nor. The early Tang *Zhengyi* commentary to the *Book of Documents* (c. 642 CE) rejected this identification on the grounds that the Juyan Lake was not far enough in the west to mark the westernmost limit of Yu's authority. But the *Tongdian* (c. 801 CE) and *Yuanhe junxian tuzhi* (c. 813 CE) both identified the Juyan Lake with the shifting sands mentioned in classical texts like the "Yugong," suggesting that Ban Gu's interpretation remained commonly accepted in the Tang period. Note, however, that another passage in the *Tongdian* claims that Dunhuang—which lay further west than the Juyan Lake—"was also the land of shifting sands in antiquity": Ban 1962, 28b.1613; Kong 2000, 6.160, 171; Du 1988, 147.4553, 4556; Li 1983, 40.1022, 1025.

54 Skaff 2012, 53. The reader will recall that Cen Wenben's Discourse identifies the "purple wall" (i.e., the Great Wall) as one of the northern boundaries of the Central Lands. The original Great Wall, far from being a natural obstacle created by Heaven, was a manmade structure built under the First Qin Emperor (supposedly at the cost of many lives) and lengthened under Han Wudi. But the paradox of these two arch-expansionists being responsible for defining a boundary between the Chinese and the barbarians does not seem to have troubled Cen Wenben, probably because he was merely aiming for literary symmetry with the "red border" in the south and the "cerulean sea" in the east, rather than trying to create a definitive list of boundaries. Moreover, the Great Wall in use during Cen Wenben's time was not the Qin-Han wall but rather the wall built by the Northern Qi dynasty (550–77 CE), which lay further south. It is also somewhat surprising that Cen Wenben would identify the sea as the eastern boundary of the Central Lands in both the preface and the Discourse. After all, although the Korean peninsula is surrounded by sea on three sides, it is nonetheless connected to the Eurasian mainland, and the fact that Goguryeo also controlled the Liaodong peninsula meant that it was really the Liao River that effectively marked its border with the Tang Empire in Cen's day. From that perspective, it would have served Cen Wenben's rhetorical purposes better to represent this river as an absolute boundary of separation between Chinese and barbarians. I suspect that Cen did not do so because the idea of the sea defining the eastern limits of a sage-king's influence had a well-known classical precedent in the "Yugong," a text written at a time when Liaodong was barely known to the Chinese.

55 Wei 1973, 81.1828–9; Fan 1965, 85.2807.

56 For this reason, the Tang emperor Taizong's (r. 626–49 CE) attempt at invading Goguryeo in 645 aroused a great deal of consternation and remonstrance from his ministers and even from a number of generals.

57 I place 'Daoist' in quotation marks because not all scholars agree that the term is applicable to classical texts like the *Laozi daodejing*. Some would prefer to reserve 'Daoist' for referring to texts produced by the later religious traditions centered on belief in Laozi's divinity and on communicating with a realm of other divine, transcendent, or spiritual beings.

58 I.e., Laozi, the purported author of the *Laozi daodejing*.

59 A living person representing the deceased ancestor during the performance of ancestral rites.

60 Du 1988, 185.4978–80.

61 Cf. Peter Bol's translation: "They do not bring into being sages and worthies; no one reforms their old customs, or instructs them as to what is not permitted; ritual and righteousness does not reach them." I would argue that this reading breaks up the A-A B-B parallelism of the original text and therefore changes its meaning: Bol 2009, 85.

62 Cf. Bol's translation: "They are outside and not inside; they are distant and not close. If they come then control them; if they depart then defend against them." This misses the allusion to Ban Gu's Xiongnu chapter Appraisal, in which the word *yu* is accompanied by *cheng* (punish) and therefore means "repel," not "control." In the Appraisal, moreover, the words *wai* (outside), *nei* (inside), *shu* (far off), and *qi* (close) are used as verbs, not adjectives. Bol 2009, 85.

63 Du 1988, 185.4980.

64 Pulleyblank 1960, 101–2.

65 McMullen 1987, 63–4.

66 Du 1988, 185.4980.

67 Du 1988, 185.4980–81.

68 Pan 1997, 347. The "roots and branches" metaphor, which was used to argue that the Chinese people's welfare comes before that of barbarians, comes from a 630 memorial by Li Daliang (586–645 CE) that urged Tang Taizong not to annex territory in the Western Regions. The text of

the memorial appears in numerous primary sources, the earliest of which are the early eighth-century *Zhenguan zhengyao* and the *Tongdian*. See Du 1988, 197.5413; Wu 2003, 9.503.

69 Bol 2009, 84–90, 100.

70 Wang Gungwu claims that in early Tang edicts and memorials "derogatory language justifying the use of force . . . derived from increasingly hostile Chinese attitudes toward non-Chinese cultures and the 'inferior' people such cultures produced . . . [and] led to the view that China could not depend on virtue and moral superiority, but needed to use force against recalcitrance and barbarism." Iain Johnston interprets all "racialist" rhetoric likening barbarians to animals as advocating the use of violence against them, while assuming that all opposition to expansionist warfare was based on "Confucian-Mencian" beliefs that the Chinese and barbarians were "one family" and that barbarians could be incorporated peacefully into the Chinese realm through conversion to "Sino-Confucian cultural norms": Wang 1983, 48–9; Johnston 1995, 65, 186–93.

71 Of course, such an argument could also be co-opted for other rhetorical purposes. A famous example is a memorial of 299 CE in which Jiang Tong (d. 310 CE) used tropes borrowed from the Han anti-expansionist tradition to argue for the expulsion of all "barbarian" immigrants from the Western Jin Empire (266–316 CE). See Fang 1974, 56.1529–30.

72 This saying is widely believed to have been invented by US Senator George Aiken (1892–1984) in 1966, with reference to US involvement in the Vietnam War. But see Stoler 1978.

73 Aristotle, *Politics*, 1.1.5 (1252b), 7.5.6 (1327b); Euripides, *Iphigenia at Aulis*, 1400.

74 Chang 2009.

75 Trauzettel 1975; Tillman 1979. In Tillman's subsequent first book on Chen Liang, however, he appears to reject the use of the terms "proto-nationalism" or "nationalism" to describe Chen's ideas: Tillman 1982, 7.

76 Chang 2009, 242–329.

Bibliography

Ban, Gu 班固. 1962 [reprint]. *Hanshu* 漢書. Beijing: Zhonghua Shuju.

——. 1994 [reprint]. *Bohu Tong Shuzheng* 白虎通疏證. Beijing: Zhongshua Shuju.

Bergeton, Uffe. 2006. "The Evolving Vocabulary of Otherness in Pre-Imperial China: From 'Belligerent Others' to 'Cultural Others.'" MA thesis, University of Southern California.

——. 2013. "From Pattern to 'Culture'?: Emergence and Transformations of Metacultural *Wen*." PhD dissertation, University of Michigan.

Bol, Peter K. 2009. "Geography and Culture: The Middle-period Discourse on the *Zhong guo*—the Central Country." In *Kongjian Yu Wenhua Changyu: Kongjian Zhi Yixiang, Shijian Yu Shehui De Shengchan* 空間與文化場域：空間之意象、實踐與社會的生產, edited by Huang Ying-kuei 黃應貴, 61–105. Taipei: Hanxue Yanjiu Zhongxin.

Chang, Chishen 張其賢. 2009. "'Zhongguo' Gainian Yu 'Hua Yi' Zhi Bian De Lishi Tantao"「中國」概念與「華夷」之辨的歷史探討. PhD dissertation, National Taiwan University.

Chen, Yinke 陳寅恪. 1994 [1943]. *Tangdai Zhengzhishi Shulun Gao* 唐代政治史述論稿. Taipei: Taiwan Shangwu Yinshuguan.

De Crespigny, Rafe. 2006. "Some Notes on the Western Regions in Later Han." *Journal of Asian History* 40.1: 1–30.

Dikötter, Frank. 1992. *The Discourse of Race in Modern China*. London: Hurst and Company.

Du, You 杜佑. 1988 [reprint]. *Tongdian* 通典. Beijing: Zhonghua Shuju.

Duara, Prasenjit. 1996. *Rescuing History from the Nation: Questioning Narratives of Modern China*. Chicago, IL: University of Chicago Press.

Fan, Ye 范曄. 1965 [reprint]. *Hou Hanshu* 後漢書. Beijing: Zhonghua Shuju.

Fang, Xuanling 房玄齡, ed. 1974 [reprint]. *Jinshu* 晉書. Beijing: Zhonghua Shuju.

He, Xiu 何休 (with subcommentary by Xu, Yan 徐彥). 1999 [reprint]. *Chunqiu Gongyang Zhuan Zhushu* 春秋公羊傳註疏. Beijing: Beijing Daxue Chubanshe.

Hoshina, Sueko 保科季子. 2007. "Kanju No Gaikō Kōsō—'Iteki Fushin' Ron Wo Chūshin Ni" 漢儒の外交構想—「夷狄不臣」論を中心に. In *Chūgoku Higashi Ajia Gaikō Kōryūshi No Kenkyū* 中国東アジア外交交流史の研究, edited by Fuma Susumu 夫馬進, 31–51. Kyoto: Kyoto University Press.

Isaac, Benjamin H. 2004. *The Invention of Racism in Classical Antiquity*. Princeton, NJ: Princeton University Press.

Johnston, Alastair Iain. 1995. *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History*. Princeton, NJ: Princeton University Press.
Kong, Anguo 孔安國 (with subcommentary by Kong, Yingda 孔穎達). 2000 [reprint]. *Shangshu Zhengyi* 尚書正義. Beijing: Beijing Daxue Chubanshe.
Leibold, James. 2007. *Reconfiguring Chinese Nationalism: How the Qing Frontier and Its Indigenes Became Chinese*. New York: Palgrave MacMillan.
Li, Fang 李昉, ed. 1994 [reprint]. *Taiping Yulan* 太平禦覽. Shijiazhuang: Hebei Jiaoyu Chubanshe.
Li, Jifu 李吉甫. 1983 [reprint]. *Yuanhe Junxian Tuzhi* 元和郡縣圖志. Beijing: Zhonghua Shuju.
Linghu, Defen 令狐德棻 ed. 1971 [reprint]. *Zhoushu* 周書. Beijing: Zhonghua Shuju.
Liu, Guofang 劉國防. 2002. "Han Xiyu Duhu De Shizhi Jiqi Niandai" 漢西域督護的始置及其年代. *Xiyu Yanjiu* 西域研究 2002(3): 18–22.
Liu, Xu 劉煦 ed. 1975 [reprint]. *Jiu Tangshu* 舊唐書. Beijing: Zhonghua Shuju.
McMullen, David. 1987. "Views of the State in Du You and Liu Zongyuan." In *Foundations and Limits of State Power in China*, edited by S.R. Schram, 59–85. Hong Kong: The Chinese University Press.
Major, John S., Queen, Sarah A., Meyer, Andrew Seth, and Roth, Harold D., trans. 2010. *The Huainanzi: A Guide to the Theory and Practice of Government in Early China*. New York: Columbia University Press.
Meserve, Ruth I. 1982. "The Inhospitable Land of the Barbarian." *Journal of Asian History* 16: 51–89.
Nylan, Michael. 2010. "*Yin-Yang*, Five Phases, and *Qi*." In *China's Early Empires: A Reappraisal*, edited by Michael Nylan and Michael Loewe, 398–414. Cambridge: Cambridge University Press.
Pan, Yihong. 1997. *Son of Heaven and Heavenly Qaghan: Sui-Tang China and its Neighbors*. Bellingham, WA: Center for East Asian Studies, Western Washington University.
Pines, Yuri. 2002. "Changing Views of *Tianxia* in Pre-Imperial Discourse." *Oriens Extremus* 43: 101–16.
——. 2004. "Beasts or Humans: Pre-imperial Origins of the 'Sino-Barbarian' Dichotomy." In *Mongols, Turks, and Others: Eurasian Nomads and the Sedentary World*, edited by Reuven Amitai and Michal Biran, 59–102. Leiden: Brill.
Pulleyblank, Edwin G. 1960. "Neo-Confucianism and Neo-Legalism in T'ang Intellectual Life, 755–805." In *The Confucian Persuasion*, edited by Arthur F. Wright, 77–114. Stanford, CA: Stanford University Press.
Qian, Mu 錢穆. 1988 [1948]. *Zhongguo Wenhuashi Daolun* 中國文化史導論. Shanghai: Sanlian Shudian.
——. 1989 [1959]. *Minzu Yu Wenhua* 民族與文化. Taipei: Sanmin Shuju.
Rickett, W. Allyn. 1993. "*Kuan Tzu*." In *Early Chinese Texts: A Bibliographical Guide*, edited by Michael Loewe, 244–51. Berkeley, CA: The Society for the Study of Early China and the Institute of East Asian Studies, University of California, Berkeley.
——, trans. 1998. *Guanzi: Political, Economic, and Philosophical Essays from Early China, Volume Two*. Princeton, NJ: Princeton University Press.
Riegel, Jeffrey. 1993. "*Li Chi*." In *Early Chinese Texts: A Bibliographical Guide*, edited by Michael Loewe, 293–7. Berkeley: The Society for the Study of Early China and the Institute of East Asian Studies, University of California, Berkeley.
Sima, Qian 司馬遷. 1959 [reprint]. *Shiji* 史記. Beijing: Zhonghua Shuju.
Skaff, Jonathan Karam. 2012. *Sui-Tang China and Its Turko-Mongol Neighbors: Culture, Power and Connections, 580–800*. Oxford: Oxford University Press.
Stoler, Mark A. 1978. "What Did He *Really* Say? The 'Aiken Formula' for Vietnam Revisited." *Vermont History* 46(2): 100–108.
Sun, Zhanyu 孫占宇. 2006. "Dunhuang Hanjian Wang Mang Zhengfa Xiyu Zhanzheng Shiliao Yanjiu Zongshu" 敦煌漢簡王莽征伐西域戰爭史料研究綜述. *Xiyu Yanjiu* 西域研究, 105–10.
Tillman, Hoyt Cleveland. 1979. "Proto-Nationalism in Twelfth-Century China? The Case of Ch'en Liang." *Harvard Journal of Asiatic Studies* 39: 403–28.
——. 1982. *Utilitarian Confucianism: Ch'en Liang's Challenge to Chu Hsi*. Cambridge, MA: Council on East Asian Studies, Harvard University.
Townsend, James. 1992. "Chinese Nationalism." *The Australian Journal of Chinese Affairs* 27: 97–130.
Trauzettel, Rolf. 1975. "Sung Patriotism as a First Step toward Chinese Nationalism." In *Crisis and Prosperity in Sung China*, edited by John Winthrop Haeger, 199–213. Tucson, AZ: University of Arizona Press.
Wang, Genlin 王根林, Huang, Yiyuan 黃益元, and Cao, Guangfu 曹光甫, eds. 1999. *Han Wei Liuchao Biji Xiaoshuo Daguan* 漢魏六朝筆記小說大觀. Shanghai: Shanghai Guji Chubanshe.
Wang, Gungwu. 1983. "The Rhetoric of a Lesser Empire: Early Sung Relations with Its Neighbors." In *China Among Equals: The Middle Kingdom and Its Neighbors, 10th–14th Centuries*, edited by Morris Rossabi, 47–65. Berkeley: University of California Press.

Wei, Zheng 魏徵, ed. 1973 [reprint]. *Suishu* 隋書. Beijing: Zhonghua Shuju.
Wu, Jing 吳兢. 2003 [reprint]. *Zhenguan Zhengyao Jijiao* 貞觀政要集校. Beijing: Zhonghua Shuju.
Yang, Xiong 揚雄. 1987 [reprint]. *Fayan Yishu* 法言義疏. Beijing: Zhonghua Shuju.
Yao, Dali 姚大力. 2002. "Zhongguo Lishi Shang De Minzu Guanxi Yu Guojia Rentong" 中國歷史上的民族關係與國家認同. *Zhongguo Xueshu* 中國學术 2002(4): 187–206.
Zheng, Xuan 鄭玄 (with subcommentary by Kong, Yingda 孔穎達). 1999 [reprint]. *Liji Zhengyi* 禮記正義. Beijing: Beijing Daxue Chubanshe.
Zhou, Zumo 周祖謨. 2004. *Erya Jiaojian* 爾雅校箋. Kunming: Yunnan Renmin Chubanshe.

23

THE MONSTROUS RACES OF INDIA IN THE EARLY STAGES OF RECONNAISSANCE

Galia Halpern

Introduction

The fifteenth century is conceived of as a period when Humanists, educated in the Classics, engaged in new critical ways with the reports of their traveling contemporaries.[1] A report of India (c. 1444) forged through the collaboration of two men, the Venetian merchant Nicolò Conti and the Humanist and papal secretary Poggio Bracciolini, is regarded as exemplary of new geographical methods that departed drastically from scholastic or courtly antecedents. While collaboration between men of personal experience and men of the book was nothing new, nor was editorial reworking of travelers' tales, Joan-Pau Rubiés notes that "the distance that separated Poggio from Rustichello di Pisa or from Francesco Pipino was substantially greater than that which separated Nicolò Conti from Marco Polo."[2] Ultimately, that distance resulted in "a new model of organization of cultural spaces . . . encyclopedic accumulation in a theological framework gave way to a critical discrimination of sources of knowledge."[3]

Such divisions between clerical and Humanist critical practice, while true, are somewhat overstated. Well known, for example, are the exchanges between Roger Bacon and the missionary traveler William of Rubruck while Bacon was writing his *Opus majus* (c. 1267). That Bacon integrated Rubruck's observations about Mongol Central Asia into a structured, doctrinally consistent representation of the world in no way implies that Bacon was disinterested in carefully weighing the geographical evidence of the Ancients against the eyewitness reports of his contemporaries. He observed, "many things are found written which authors have gathered from reports more than from experience."[4] Armed with Rubruck's observations, for example, Bacon noted that "Pliny was not accurate in saying that the Caspian Sea rises from the ocean."[5]

Moreover, Bracciolini was not entirely free of cultural bias when he shaped Conti's idiosyncratic observations into an ordered report. Clerics and Humanists alike adhered to Ancient views on differing climates and the impact of environment on civilization. Climatic theory, inherited from the Greco-Roman past, governed medieval scientific arrangements and persisted well into the Colonial Era. Latitude defined environment and the nature of places and inhabitants.[6] Bacon explained the relationship of place and the nature of things, stating how, based on their location, "man would be able to know the characteristics of all things in the world and their natures and qualities."[7]

Bracciolini was not immune to similar notions about climate, place, and regional profile. He questioned some Ethiopian ambassadors at the same time that he interviewed Conti, augmenting Conti's report with their description of the source of the Nile.[8] In merging the descriptions of India and Africa (Ethiopia) into one account, Bracciolini perpetuated the Greco-Roman tradition that associated the tropical characteristics of the two regions.[9] In his *Indica*, Arrian noted, "India and Ethiopia are not dissimilar countries . . . There is no great difference either in the appearance of [their] human inhabitants" (Arr. *Anab*. 8.6.8–9).[10] Pliny, whom Bracciolini cited in Conti's report, believed in the common effects of the sun on Indian and Ethiopian skin color on account of their equatorial location (Plin. *HN*. 6.22.70).[11] The Humanists did not outright 'revive' this set of Greco-Roman theories so much as they applied it to an emergent imperial and commercial context.

Ancient maps and Christianity

Climate theory was never abandoned in the medieval period. Nor did many early-Christian writers outright reject classical climatic models and the idea that a parallel land existed to the south, mirroring the northern temperate climate. The real question was whether this southern land was inhabited, which seemed to conflict with Scripture.[12] For this reason, many point to Augustine as the harbinger of an anti-classical geographical model. In *De Civitate Dei*, Augustine pointed out that no credible proofs existed in Scripture to support the existence of a peopled antipodal continent. It would be absurd, he wrote, to think man had traversed the ocean and that descendants of Adam lived south of the torrid zone (August. *De. Civ. D*. 16.9).[13] These debates about an inhabited landmass were essentially cerebral, however, and meant to reinforce the truth of the Book, not to ascertain the current state of geographical knowledge.

The basic theory that the earth was divided into latitudinal belts, varying in temperature from the extreme heat of the equator to the freezing temperatures of the poles, remained by and largely intact despite debates about human access to regions beyond the known world. The zonal arrangement can be seen in the so-called Macrobian map which was reproduced throughout the medieval period, drawn from the late antique philosopher Macrobius' *Commentarii in Somnium Scipionis*.[14] Macrobius wrote how the earth is "divided into regions of excessive cold or heat, with two temperate zones between the hot and cold regions." The extreme zones could not support life, but the temperate zones could (Macr. *Somn*. 2.5.10–12).[15] The model is neatly summarized by Isidore in the early seventh-century *Etymologiae*: "There are five zones of the sky. Some have temperate weather and are inhabitable; others are uninhabitable because of extreme heat or cold." He concludes, "These regions are called zonae, belts, or *circuli*, circles, because the spheres are in a circuit" (Isid. *Etym*. 3.44.1).[16]

The Christian belief that nature at the extreme peripheries of the earth produced supranatural life was incorporated into this ancient model, infusing it with a new Christian morality.[17] Different locations that produced different bodies came to signify Christian and geopolitical truths. Bacon explained this quintessential Christian perspective. Not only the literal nature of a place could be ascertained by knowing its location, also "by means of suitable adaptations and similitudes taken from things the spiritual meanings may be elicited."[18] From this compatibility were born fifteenth-century ideological justifications for colonial exploitation.[19]

Nicolás Wey Gómez has explained the motives behind Christopher Columbus's search for a "cosmography of riches" in the tropics and his persistent southing of exploration routes in the New World.[20] The subject of Gómez's extensive study, the gradual transformation of the torrid equatorial zone from a land of burnt waste and burned people to a land of natural abundance

and willing subjects, played out in the centuries leading up to 1492. My contribution to this line of research is much humbler and confined here to the mid-fifteenth century. A subtle change in attitude is found in work such as those of Conti and Bracciolini. One can detect new ideas about what constituted monstrosity but no major redefinition of where monsters were to be found and what environments bred them. Thus, the Greco-Roman belief in location as a pivotal factor in determining the nature of a place persisted as a guiding framework for elucidating travelers' observations, even when these observations conflicted with established lore.

Increasingly, the monstrous races were defined by their natural state and the effects of latitude on the civilizing process. Moreover, their presence in a region signified the superabundant landscape whence they sprung, reinforcing European expectations of plenitude linked to nature at the world's margins. Such expectations can be traced to ancient geographers such as Pliny and Ptolemy, whose theories were widely reproduced in late medieval scholastic and Humanist circles.[21] In the fifteenth century, scholastic experts and Humanists alike took these accepted theories and put them to work in articulating Europe's new vision of a productive global economy, revealing a major continuity in thought between these two types of intelligences and the Christian heritage of Humanism.

Shortly after Bracciolini completed his work *De varietate fortune*, of which Book 4 was Conti's account, a learned Camaldolensian friar, Fra Mauro, consulted Conti's report for a map of the world (c. 1448–53) he made for Venetian civic leaders (see Figure 23.1).[22] This monumental map is a well-known hallmark of fifteenth-century cartography on account of its maker's ambitions and access to updated knowledge, as well as Fra Mauro's adherence to intellectual tradition.[23] It includes just shy of 3,000 place names and inscriptions with commentary on, and information drawn from, numerous classical, patristic, and contemporary medieval sources about the extent, disposition, and inhabitants of the known and imagined world.[24] Through the example of this outmoded circular world map, I will examine how Greco-Roman climatic theory and Christian moral geography reinforced a new materialist colonial worldview that was gaining traction in Europe at the time.

The last great *mappamundi*, Fra Mauro's world map epitomizes the "great debate about geography which was raging in fifteenth-century Europe," following the rediscovery of Ptolemy's *Geographia (Cosmographia)*.[25] This debate had to do with interpreting those parts of the earth that had entered Western consciousness in the medieval period and could not be accurately accounted for in the *Geographia* and other ancient texts, all held in highest esteem by the Humanists. Fra Mauro also respected these authorities; he cites Ptolemy, Solinus, Aristotle, Pomponius Mela, Flavius Arrianus, Strabo, and Pliny as classical authorities, and St. Augustine, St. Jerome, Hrabanus Maurus, Albertus Magnus, and Thomas Aquinas as Christian experts.[26] On the surface of the map, peppered with these revered names, he seems to privilege the knowledge of the past. Among the many inscriptions, not once does he mention by name his medieval sources. The works of Marco Polo (c. 1295), Friar Odoric of Pordenone (c. 1331), and Nicolò Conti are not cited, despite the fact that Fra Mauro was greatly indebted to these travelers and others for his material on Asia, India, and Africa, and despite his opinion that Venice was the center of geographical knowledge and maritime culture (from where Polo and Conti came).[27] Although he drew on these travelers' reports, he managed to name ancient sources, even if only to remind his audience that the extreme ends of the earth were little known to them.

Fra Mauro thus utilized both Ancient authority and Christian moral geography to frame and order the intellectually inconsistent observations of medieval travelers and contemporaries.[28] In his map, the dialogue between past and present authorities is an adroit admission of several knowledge systems that coalesce around the depiction of the Indian Ocean—that *terra incognita*

Figure 23.1 Fra Mauro, World Map, c. 1450 (Biblioteca Marciana, Venice)

that attracted the current attention of the Portuguese and Italians. Fra Mauro addressed his audience's commercial and imperial interests when he wrote on the map:

> I do not think that I am being unfaithful to Ptolemy if I do not follow his *Cosmography* [i.e. *Geography*], because if I had wanted to observe his meridians, parallels and degrees, I would have had to omit many provinces within the known part of the world that Ptolemy does not give: everywhere in his account, but especially to the north and south, he gives areas as *terra incognita* because in his day they were not known.[29]

The mapmaker shaped the recently observed "peripheries" of the map under a single coherent world order, selectively citing and refuting Greco-Roman and patristic sources to establish an interpretative framework. His selective criticism of classical writers, inserted along the ideological periphery of the ancient and scriptural world—in Africa, the Indian Ocean, the utter

North, and Gog and Magog—negate outdated facts while simultaneously reinforcing these writers' cosmographical framework to absorb new information. He adheres to Greco-Roman models when he divides up the world into seven climatic zones, arguing for the habitability of the equator in the cosmological notes in the lower right-hand corner of the map, rubricated "How the earth which is below the Equator and the torrid zone may be habitable."[30] To support his conclusion, he mentions Ptolemy's *Geography*, Albertus Magnus' *De nature loci*, and Averroës' commentary on Aristotle.[31] He deploys the climatic system to make sense of Conti's and Polo's findings, rendering these merchants' subjective observations meaningful in a spatially complete "hierarchy of humanity" that we also find in his Greco-Roman and Christian sources.[32]

Medieval content, ancient models

In two legends, Fra Mauro communicates directly with the map's intended audience, informing them of the significance of the map and what to expect in his selection and placement of texts. In the first, at the bottom center of the map, just south of the land of the Permians, Fra Mauro dedicates the map to the most "illustrious Seignory" of his native Venice and informs them that the map is incomplete, "because it is not possible for the human intellect, without the help of some higher demonstration, to verify completely this cosmography or that mappamundi . . . ."[33] In the second inscription, to the immediate west of Spain and south of the British Isles, Fra Mauro apologizes for the large size of cities he has painted in Asia and the small size of those he has placed in Europe. He justifies the differences in scale by alluding to Europe's impartial knowledge of the East and to Asia's and Africa's vast sizes: "Where I have had space I have made the places big; where I have been short of space, I have made them small."[34]

We are to understand from these comments that despite the absence of conventional pictorial symbols, Fra Mauro's world map extends from the scholastic tradition of mappaemundi and that map-type's drive towards a totalizing historical and spatial Christian narrative.[35] The concentric rings and symmetry of orthodox world maps are still at play. What is more, we can expect to find longer legends precisely where there is space for them on the map. That is to say, we will find them in regions defined by spatial ambivalence, where the classical marvels and monsters once lived, now gradually replaced by the observations of medieval travelers. These blank spaces contain extra written explanations drawn from respected authorities, fixing those regions' identities since their long-accepted natures were at the time being called into question. The pairing of texts and blank spaces allows us to consider who and what Europeans expected to find in distant regions and how these expectations were framed intellectually.

Inscriptions located along the outer rim of the map regularly express skepticism of ancient knowledge about distant locations, contrasting it with contemporary information. In one example, Fra Mauro writes about the wild northern nation of the Permians, who drive dog sleds, and trade ermine and sable with European merchants. This is taken from Marco Polo. They lived in extreme northern regions in underground caves, ate animal flesh, and wore only pelts. They were not very industrious.[36] At the same time, Fra Mauro is surprised that Ptolemy knew of the long 18-hour summer days in Scandinavia, for "it amazes me that he [Ptolemy] knew this, when all this area of Norway and Sweden was unknown to him."[37] The reference to length of day is not found in the *Geographia*.[38] Ptolemy fixed the northern limit of the *oikoumenē* at 63 degrees north of the equator, at the island of Thulē (Ptol. *Geog*. 7.5).[39] The manipulation of source information draws our attention to the mapmaker's conscious placement of named authorities

adjacent to merchants' information. He is attributing current knowledge to a respected source through an expression of surprise, building up Ptolemy's credibility.

Fra Mauro was also critical of Christian superstitions regarding the utter northeast reaches of the world, yet he utilized the names of Christian writers as resourcefully as he did classical ones. While he locates the tribes of Gog and Magog north of Tenduch, he proceeds to explain that the tribes are "called the Ung and the Mongul, which people know as Gog and Magog."[40] The etymology of the tribes' names and rather mundane history were reported by Polo, who mentioned them only in passing: "[W]e call the country . . . Gog and Magog; they [The Mongols], however, call it Ung and Mungul, after the names of two races of people."[41] Throughout the medieval period, however, a prominent legend linked the nations of Gog and Magog with the Antichrist. The mapmaker outright rejects this belief: "[C]ertainly this mistake is due to the way some force the Sacred Scriptures to mean what they want them to mean."[42]

Fra Mauro mentions Augustine and not Polo by name at this point. He writes that Augustine, "in his *De Civitate Dei* rejects all the opinions of those who claim Gog and Magog are the peoples that will support the Antichrist."[43] Augustine resisted the temptation to locate the followers of the devil in one region. His opinion was that challenges to the Holy Church would arise from within all communities of Christ. Gog and Magog "are not to be understood as of some barbarous nations in some part of the world" (August. *De Civ. D*. 20.11). Fra Mauro thus affixes Augustine's authority to the very place which Augustine rejected. Just as he deployed Ptolemy's authority to discuss Scandinavia, he names respected patristic sources to mask his use of updated travel reports about highly speculative distant locations.

Nowhere is the need to corroborate medieval discoveries with received knowledge more apparent than in Africa, where restoration of classical authority was most problematic for contemporary interests. In the *Geographia*, Ptolemy stated with no uncertainty that the Sea of India "is contained by land on all sides" (Ptol. *Geog*. 7.5). The land-locked Indian Ocean conflicted with current maritime ambitions and belief that India could be accessed via the Atlantic. Fra Mauro carefully selected his sources to address this conflict of geographical ideas, going to great pains to prove that many in the past knew Africa to be circumnavigable. Faulting geographers like Ptolemy who "write that the Sea of India is enclosed like a pond," Fra Mauro points out that Solinus, Pliny, and "some ships" of contemporary Portuguese ventures can affirm the open sea route to India.[44]

He is referring here to chapters in Solinus' and Pliny's works in which they both drew their information from Juba [Juba II of Mauritania]. Pliny wrote how "Juba holds that at Cape Mossylites begins the Atlantic Ocean, navigable with a north-west wind along the coast of his kingdom of the Mauretanians as far as Cadiz" (Plin. *HN*. 6.34.175).[45] Solinus echoed this claim, noting that the encompassing ocean's waves beat against the coasts of India with the most violence and that Juba knew the ocean could be traversed from India to Cadiz (Solin. *Collect*. 23. 17–18; 56.4–6).[46]

Fra Mauro encourages his audience to accept Africa's medieval profile and not to discredit anecdotal evidence simply because it cannot be traced back to classical treatises. He writes how "it will appear as a novelty that I should speak of these southern parts [i.e., Africa], which were almost unknown to the Ancients." He explains that he interviewed native-born clerics, who "with their own hands, drew for me these provinces and cities and rivers and mountains with their names."[47] Evident from the southern orientation of the map, Fra Mauro augmented the Ethiopian and Portuguese reports with information drawn from Arabic maps and accounts about the Indian Ocean. The imprint of Arabic geography in this region is further reinforced by Fra Mauro's multiple references to the ocean waters' darkness and

obscurity, a literary convention specific to Arabic geography.[48] In comparing past and present knowledge, Fra Mauro actually privileged medieval discoveries in the south, this despite the presence throughout the region of classical writers' names.[49]

Further into the African inscriptions, Fra Mauro outright rejects the findings of the ancients, casting doubt on the existence of the "human and animal monsters" mentioned so frequently by "many cosmographers and most learned men."[50] He writes of his hesitation to contradict classical geographers, but in all of his research on Africa, "I have never found anyone who could give me information on what those men [the ancient cosmographers] have written."[51] Even while criticizing them, he invokes respected authorities to invest southern regions with a sense of antiquity, bringing them under the sign of a sanctioned Western science. He mentions and refutes the presence of monsters to the south so that he can remind readers that historically, equatorial Africa was a place where the ancients *expected* to find monsters.

This expectation is important, because it alludes to the strangeness of distant environments and the idea of difference rooted in physical distance from the Mediterranean and the ideal temperate climate. Fra Mauro perpetuates ancient models that calibrated excesses of nature with locations at the limits of Western knowledge. He insists that he is not "unfaithful" to the ancients in amending their errors with updated knowledge. Rather, he conceives of his adjustments as a way to reinforce their authoritative works. In his dedication to the Venetian Seignory, he even states as much:

> I do not want to defend this map in any other way than that in which Ptolemy defends himself when, in the first chapter of the second book [i.e., the *Cosmography*], he says that one can only speak correctly of regions that are visited continually . . . he [Ptolemy] is actually admitting that with the passage of time the work could be improved . . . So I say that in my own day I have been careful to verify the [Ancient and Scholastic] texts by practical experience . . . .[52]

The commercial interests of the Venetian maritime enterprise, the city-state's leaders to whom Fra Mauro dedicated the map, and the Portuguese crown, for whom a copy of the map was completed by 1457–59, were deeply invested in discrediting Ptolemy's thesis about the southern contours of Africa and the land-bridge that linked Africa to India.[53] Anticipating his commercial and imperial patrons' interests, Fra Mauro inscribed the map with a cartouche reading:

> Many opinions and many texts claim that in the southern regions [i.e., South Asia, Southeast Asia, and Africa] the water does not surround this whole inhabited and temperate area. But I have heard many opinions to the contrary, above all from those who were sent by his Majesty, King of Portugal, in caravels so that they might explore and see with their own eyes . . . These men have drawn new navigation charts and have given names to rivers, gulfs, capes, and ports, of which I have a copy.[54]

Therein lies the crux of his world map. Fra Mauro manipulates classical and patristic intellectual models to moralize and conceptually shape information collected from medieval and early Atlantic travel reports. While he might have been critical of their facts, he was deeply invested in reviving classical and patristic intellectual *forms*, so as to interpret and shape updated medieval geographical *content* in such a way that supported the material ambitions of his readers.[55]

Material promise: a classical filter for medieval ethnographic works

In one of many inscriptions in the Indian Ocean, Fra Mauro summarizes prevailing European perceptions of "variety" and "diversity" as material possibility, infusing classical ethnographic sciences and Scholastic natural philosophy with a distinctly secular and commercial dimension. Unlike his measured African inscriptions, in India he calls forth the presence of diverse human monsters and links them to natural/mineral riches, uncritically endorsing every Greco-Roman source available to him:

> Note that some historiographers, such as Arrian, Solinus and even Dionysius (who was sent by King Philadelphus to investigate India) say many notable things of the Indies, of its mountains and of its rivers . . . As well, there are cities, castles and innumerable peoples of different varieties, standing and customs. There are powerful lords, great numbers of elephants and a diversity of almost incredible monsters, both human and animals . . . These writers also talk of the precious fruits, timber and herbs . . . there is the variety of gemstones—diamonds, lichnites, beryls, chrysoberyls, chrysoprases, jacinths—and many other things that I cannot mention here.[56]

Fifteenth-century cartographers sought to include a greater amount of miscellaneous information in their works, balancing respected sources, environmental theory, anthropological material, and fantasy.[57] They needed guiding interpretative frameworks to lend coherency to the increasingly idiosyncratic amalgamation of descriptive material. Fra Mauro mentions the presence of Brahmins, of "savage, untamed idolaters," and of people who "eat human flesh" in the islands of Lanuri, Nauagari, Arii, southwest of Taprobane (here, Sri Lanka).[58] These southern flesh-eaters mirror the animal flesh-eating Permians to the north in a textbook example of the symmetry found in Christian center-enhancing geography.[59] Such symmetry codifies links between content and expertise that criss-cross the map. Extreme environments produce people with barbaric customs. If Ptolemy could accurately deduce the length of summer days of Scandinavia without having been there, perhaps his report on India contains merit too? Fra Mauro embeds both expertise and diverse monstrosity within conveniently familiar patterns of expectation.

Extreme heat, rain, or remoteness all signaled the types of environments conducive to breeding marvels and monsters in Greco-Roman tradition. The ancients tended to telescope natural setting and location with outward signs of bodily difference or pejorative national traits that distinguished them from Hellenistic culture, like savagery, cannibalism, and nudity. Pliny succinctly summarized the Us-vs.-Them attitude in his description of Cilicia, where "there are only three races that can rightly be designated Greek . . . all the rest being tribes of barbarians" (Plin. *HN*. 6.2.7).[60] To the Greeks and Romans, difference was based in the observable present and customary deviance from classical culture. Christian geographers essentialized this idea of cultural difference within divine design but otherwise adhered to Greco-Roman geographical prototypes.[61] The connections between environment and customary practices became calcified, making their way not only into the map's cartouches, but also into Bracciolini's reworking of Conti's memories.

In the report, Bracciolini writes about Conti's encounter with the "Icepe" while traveling through India:

> Having left Quilon, after three days of travel, he arrived in the city of Cochin, which is five miles in circumference and stands at the mouth of the river from which it

> takes its name. Sailing for a long time on the river, he saw lit many fires on the shore at night. Thinking they were made by fishermen, he asked if they did this all night. Those who were with him on the boat, laughing, said *Icepe, icepe*. These have the human form [*forma humana*], and may be called either fish [*pisces*] or monster [*monstra*], which coming out of the water at night, gather wood, light fires by rubbing stones one against the other, and burn wood by the water. The fish, many attracted to the brightness of the fire, they capture and eat; in the daytime they hide in the water. They said that some of these were captives, and did not differ from the human form [*forma hominis*] both male and female.[62]

We come away from the passage with the distinct impression that Conti could not confirm beyond doubt that he saw true monsters. He believed the Icepe to be perfectly normal fishermen, working, not indulging in ritual, dietary, or sexual excesses that designated conventional racial deviance from European civility codes. A few captives' bodies were examined; they were perfectly formed human beings, fashioned into two biological sexes. That the Icepe differed in neither appearance nor custom from "normal" men and women implicates this passage in a radical revision of what constituted a marvel or monster. The Icepe are the new prodigies of nature that occupy the marvelous terrain of old. Strangeness here is forcibly produced through Humanist literary conventions and Bracciolini's line of questioning, not through Conti's initial impressions as a traveler.

Bracciolini admitted how eager he was to learn everything about the remote nation of India, its people's customs, and its natural yield.[63] There is a palpable expectation that India hosts a diversity of humans, beasts, trees, and spices. In harboring this expectation, Bracciolini was not departing dramatically from previous writers' expectations with which he was familiar. Pliny wrote how "India and parts of Ethiopia especially teem with marvels" (Plin. *HN*. 7.2.21).[64] The popular writers of the fourteenth century still consulted him for their reports on India, borrowing freely from Pliny's lists of marvels and monsters. Jordanus Catalani, for instance, residing in India and serving as its first bishop of the Catholic rite, exclaimed in his *Mirabilia descripta* (c. 1330s), "Every thing indeed is a marvel in this India!"[65] Odoric hinted at a marvelous topography beyond his ability to describe. He wrote not of many strange things, he claimed, because "unless a man should see them he never could believe them. For in the whole world there be no such marvels as in that realm."[66]

These reports and others were thoroughly absorbed by commercial interests and nascent imperial rhetoric aimed at establishing direct claims on India's natural wealth. The Infante Henry of Portugal began sponsoring Portuguese exploration along the west coast of Africa in the 1420s. His official biographer, Gomes Eannes de Azurara, loftily invoked Ethiopians and Indians in dedicatory material prefacing the account of the prince's deeds, mentioning their skin color, the result of their nearness to the torrid zone: "All alike in colour," the Indians "call upon me to write of thy gifts of money and raiment, of the passing of thy ship . . . ."[67] This language of marvels, colored skin, and exuberant homage bespoke of cultural superiority and the victory of civil law over the rule of natural law. Henry is identified with ships, money, and largess; the Indians are identified by their common dark skin.

Fra Mauro charts the Indian Ocean in similar terms. If his audience finds the marvelous material incredible, they should "list them amongst the secrets of Nature . . . Thus, those who want to understand must first believe in order to then understand."[68] He emphasizes the ordering of Nature, in this way framing India's marvels in orthodox and accepted ethnographic models governed by natural design. Placed squarely under the sign of natural processes, the harsh Permians of the utter north live under the influence of extreme cold, while the human monsters of India are never presented independently of the hot, remote region's natural yield.

Advocates of Greco-Roman climactic theory advanced the general formulation that temperate zones sustained better civilization than either of the two extremes ones. Widely consulted on the subject, Pliny wrote in his *Naturalis Historia* how terrestrial space was divided into five zones, with the two outermost zones "crushed under cruel frost" while the middle portion of lands "is scorched by its [the sun's] flames and burnt up by the proximity of its heat" (Plin. *HN*. 2.68.172).[69] To this observation on climate, Pliny added comments on the types of people different environments produced. Ethiopians were wise because of the variety of their climate. Races to the extreme north and south were fierce on account of the rigid climate (Plin. *HN*. 2.79.189).[70] In another example drawn from Fra Mauro's sources, Ptolemy in his *Tetrabiblios* linked the zones to the house of zodiacal constellations and stated that Ethiopians, oppressed by the heat, were savage and "sanguine" while Scythians of the north were "cold" (Ptol. *Tetr*. 2.2.56).

This zonal model culminates in an ethnocentric claim linking climate to physical, intellectual, and moral supremacy. Mild climates produced advanced civilizations, while societies living in extreme conditions were ruled by nature; they never transcended the elements. According to Pliny, the middle of the terrestrial landmass, that is, the northern temperate zone wherein lay Rome, "owing to a healthy blending of both elements," produced the best racial stocks with blended complexions, gentle customs, clear senses, and fertile intellect, whose races "also have governments, which the outer races never have possessed . . . " (Plin. *HN*. 2.79.190)[71] Ptolemy wrote how the inhabitants of the temperate zone, who enjoy mild air, are "equable people, civilized in habit, and apt at science and mathematics" (Ptol. *Tetr*. 2.2.57).

An influential zonal map is found in the Cardinal of Cambrai, Pierre d'Ailly's 1410 compilation of the *Imago Mundi*, a 1483 printed copy of which Christopher Columbus read.[72] The map exemplifies European attitudes about the natural relationship that existed between itself and India (see Figure 23.2). The circle of the world is divided into *climata* and inscribed with geographical commentary arranged in a layout of the hemispheres. Toponyms echo the layout of regions. The Nile, for example, runs south through Egypt, and there is a diagonal reference to the Red Sea. Hyspanie (Spain) dips southward, abutting the left-hand outer rim of the encompassing circle, forming the shore of the Mediterranean. The Mediterranean is located at the ideal latitude, north of the Tropic of Cancer, and all of the habitable, named locations of Europe, Asia, and Africa are to be found north of the torrid equator. They are mapped out through the act of naming "nations," that is, ethnic communities are mapped into a quasi-political spatial system.

The textual and diagrammated portrayal of India differs dramatically from the mapping system that governs the northern hemisphere, marked as India is by a significantly greater degree of spatial ambivalence. The subcontinent's speculated contours extend to the Tropic of Capricorn, so that it lies fully in the equatorial zone. D'Ailly included two anecdotes delineating India's territorial limits (which wrap around the implied back of the globe).They appear to the far south-east along the Tropic of Capricorn and to the extreme East, just north of the equator, along the edge of the circle's circumference. In the east, the inscription reads, "India contains nearly one-third of habitable land; extending towards the south."[73] To the south, the passage reads, "the southern coast of India, according to some, extends beyond the Tropic of Capricorn; its eastern side almost to the African coast."[74] India is suggested to occupy the entire equator, encircling the world.

At the same time, there is one additional inscription that anticipates northern outreach to the south. A vertical inscription runs the length of the south-western quadrant from north to south, crossing over the equator and extending well past the Tropic of Capricorn into speculated Indian and African territory. It reads, "before the climate towards the equator and beyond it are many habitations. As it is learnt from authoritative histories."[75] The direction of movement

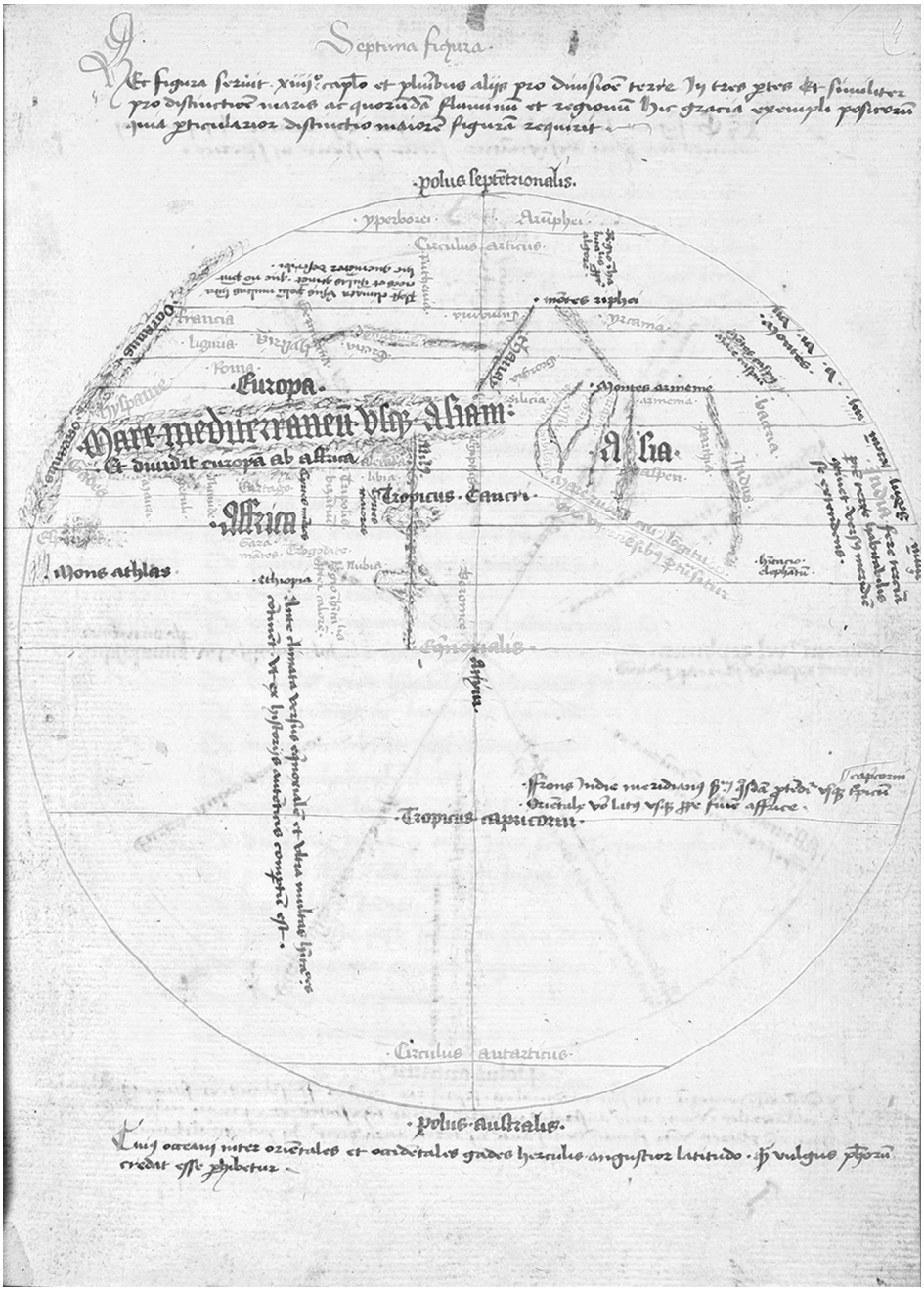

Figure 23.2 *Imago Mundi*, (after) Pierre d'Ailly (BR. Ms. 21198–204, fol. 4r., c. 1410)

from north to south is implied through the orientation of the inscription, which runs from the northern to the southern zone.

D'Ailly likely never read Ptolemy's *Geographia*, having completed his own work so soon after the translation of the *Geographia* from Greek into Latin (c. 1406). He probably consulted

the *Book of John Mandeville*, however, a popular piece of literature that perfectly summarizes then prevailing attitudes about Europe's superiority and its inherent ability to initiate global encounters.[76] "For men of Ind," Mandeville explains, "have this condition of kind, that they never go out of their own country," because they are in the first climate. "[T]he folk of that country that be under his [Saturn's] climate have of kind no will for to move ne stir to seek strange places." On the other hand, Englishmen, being in the seventh climate, that of the moon, "it giveth us will of kind . . . to go divers ways, and to seek strange things and other diversities of the world . . . ."[77]

Its western mirrors and the natural abundance of the Indies

A pervasive insistence on nature's multiplication of diverse things accompanies descriptions of Indian human monsters, as we have seen. Redundant medieval reports about the spirituality of the Bragmins and fishing practices of the Icepe are at heart concerned with flora, fauna, and minerals. In Fra Mauro's map, an inscription informs us that the inhabitants of Taprobane in the Indian Ocean are "well-formed, strong, polite and good astrologers." Their bodies are shaped by the same environmental factors that influence the size of local elephants. Due to the "fine location and air," they are "taller than those who are born in [mainland] India, just as their elephants are bigger than those in India." In turn, elephant and man alike are bigger than those of Mauritania. The reference to astrologers and elephants is interjected into a report of the island's plentiful "gold, pepper, cloves, aloes wood and a wood called galambech, which . . . is sold for its own weight in gold."[78]

Fra Mauro's world map was not the first map in which we find equatorial locations and hot air associated with the potential wealth and natural commodities reported by medieval merchants. Working in the employ of the future Joan I of Aragon, the first mapmaker who consulted Marco Polo was the Jewish royal cartographer Cresques Abraham. Cresques drew at length on Polo's report of Mongol Asia to complete the famed 1375 *Catalan Atlas*, a gift from Prince Joan to Charles V of France.[79] Cresques wrote about the thousands of islands in the "Sea of the islands of India," in a way that anticipated Fra Mauro's combination of Greco-Roman authorities and medieval travel reports. He wrote how the locals "are savages. They live on raw fish, drink seawater, and are totally naked."[80] At the same time, "spices thrive" in the Indian Ocean and "great ships of the many different nations pass."[81] This pastiche of anecdotes brings together underdeveloped civilization with well-developed economic infrastructure in an open allusion to commercial viability and exploitation.

Like Fra Mauro, Cresques did not mention the Venetian by name. Instead, he cited Ancient and patristic experts along the outer rim of the world, strategically deploying their models to further public trust in Polo's and others' reports of India's natural diversity. In the Atlantic, in an inscription adjacent to the Canary Islands, mirroring India's position to the east, Cresques included an inscription about the Fortunate Islands (the Canaries) that emphasizes their natural fecundity. He caps off the depiction of the islands with an explanation of how they factor into Roman and pagan Indian lore (see Figure 23.3). The map inscription reads:

> The 'Islands of the Blest' [*Les iles Beneventurades*] are in the Great Sea to the left, near the western margin, yet still within the sea. Isidor (of Seville) says in his 15th book that these islands are so called because they possess a wealth of all goods, corn, fruits, herbs, and trees. The heathens believe that Paradise is situated there, because the islands have such a temperate climate and such a great fertility of the soil . . . The cartographer Pli[ni]us (Pliny) also says that among the Islands of the Blest [*les yles*

> *Fortunades*] there is one on which all the gifts of the earth can be harvested without sowing and without planting. On the mountain heights the trees are never bare of leaves and fruit, which are very aromatic . . . For this reason the heathens of India believe that their souls are transported to these islands after death, where they live for ever on the scent of these fruits. This they believe that their Paradise is there. But in truth it is a fable.[82]

The reference to Pliny comes from Book 6 of the *Naturalis Historia*. Citing Juba again, Pliny wrote about Canaria and the abundance of fruit, birds, palm dates, and honey. He also

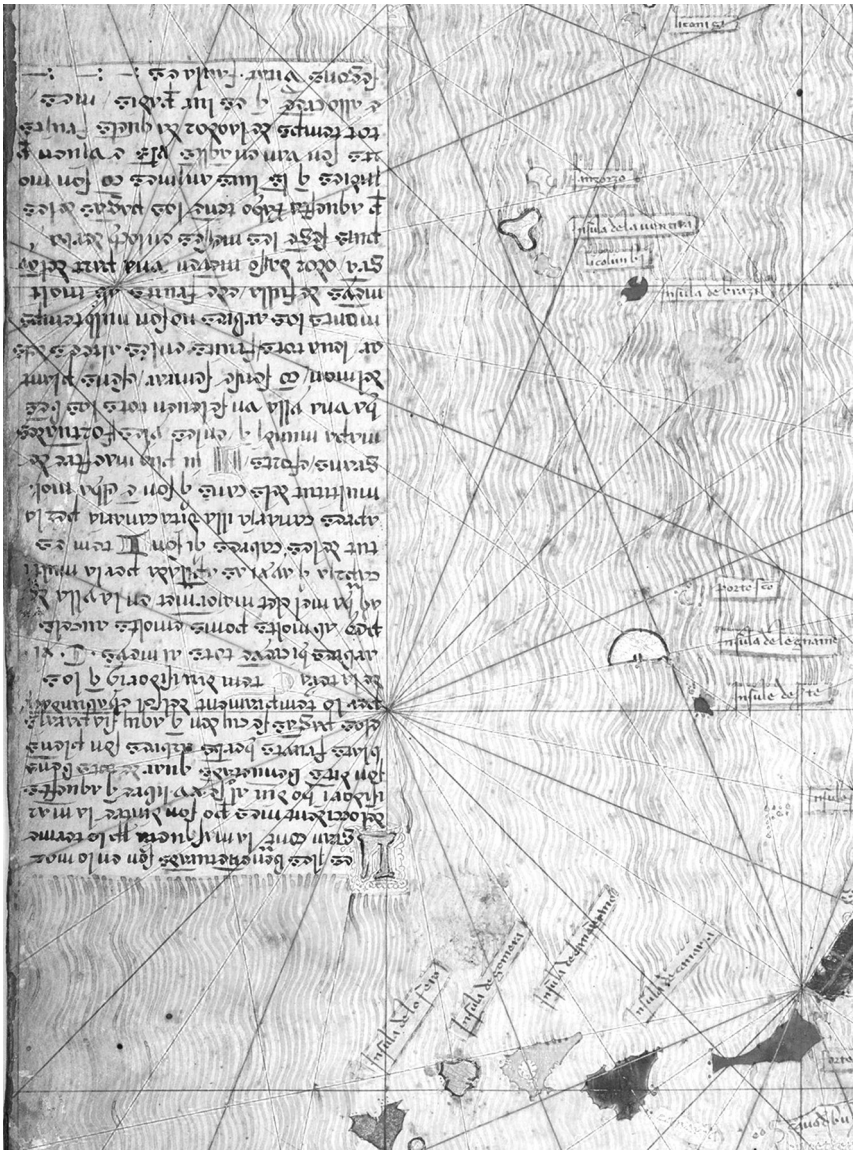

Figure 23.3 Cresques Abraham, *Catalan Atlas*, c. 1375 (BnF. Esp. 30, panel v, Detail, Isles of the Blessed)

mentioned that the carcasses of sea monsters constantly washed ashore (Plin. *HN*. 6.37.205). Similar to Fra Mauro, in Cresques' work we find a distinctly secular utility for including legendary and Greco-Roman material even if only to write it off as fable. Paradisal allusions are deployed here to establish the supra-fertile state of peripheral islands. He meticulously commodifies the natural wealth of the islands, invoking the names of Pliny and Isidore to comment on their natural harvests. Temperate island zones bear many fruits, herbs, trees, and indeed, "all goods."[83] The reference to Indian pagan beliefs in the far west Atlantic, on the lowest margins of the map, just opposite India, redirects the reader's attention from the western description to its eastern counterpart. There, Cresques assigns similar attributes to the Indian islands and portrays them in unique and colorful form. The island of Lana, for example, has "many trees of aloe, camphor, sandalwood, fine spices, garenga, nutmeg, cinnamon trees, from which the most precious spice of all India comes . . . ."[84]

Scientific and Christian frameworks were profoundly useful mechanisms for processing commercial hopes of superabundance along the equator. The inscriptions on Fra Mauro's map do not destroy the doctrinal sense of security that the visual form of the mappamundi entails, as some scholars suggest.[85] Quite the opposite, the shape of the map with its Christian narrative and the inscriptions citing Greco-Roman authorities syncopate ecological and doctrinal orders that were never truly conflicted. By repeatedly naming the ancients around the incredible rim of the world, even while refuting them as did Cresques, Fra Mauro builds up their presence in the map. At the very locations where information drawn from nameless medieval sources defies belief, the trusted Ancients can be called forth to insist on the state of productive natural law. A perfect example of this can be found in an inscription in mainland India the Greater (northwest of Cathay):

> In the Proem to his Bible, St. Jerome says that Apollonius the Philosopher crossed the river Phison to travel to certain peoples called Bragmani . . . I say this because these people—that is, the Bragmani, the Massageti, the Polibotri, the Pignei, the Pandi, and Asticani and the others who are written about here—are not very well known to us. Those who want information on their very different customs and practices should read Arrianus and Strabo, who write extensively about this India.[86]

As did Cresques in his discussion of the Canary Islands, Fra Mauro recruits Ancient authority to reinforce the natural order and to periodically redirect the reader's attention from other parts of the map to India. Near the Andaman Islands, off to the southeast of Taprobane (here, Sumatra), Fra Mauro writes that the island "is inhabited by idolatrous, cruel people given to the use of spells and magic."[87] After linking the island with the expected bizarre barbarians, Fra Mauro gets to the enticing part of the description: "Many say that on this island there is a lake in which, if you immerse iron, it becomes gold. I say this just to do justice to the testimony of many people" (see Figure 23.4).[88]

This information comes from Catalani's medieval marvels book: "Every metal which is washed with that water becomes gold."[89] As is his typical practice, Fra Mauro does not name Catalani as his source. He instead mentions the "testimony of many people," invoking collective authority to verify the incredible, and incredibly lucrative, gold-producing lake. This marvel is almost beyond credulity, but Fra Mauro exploits the full weight of the Ancients to testify to its existence. On the exact opposite side of the known world, in Hibernia (Ireland) (see Figure 23.5), "which is most extraordinarily fertile," he writes:

Figure 23.4 Fra Mauro, World Map; detail, Andaman Island

> . . . it is said that there is a water in which, if you immerse wood, after a while that part of the wood which is in the earth becomes iron, whilst that in the water becomes stone, and that above the water remains wood. And if one believes this thing, one can also believe in the lake of Andaman. Those who wish to have plentiful information on these wonderful and these monstrous things should read Julius Solinus's *Polyhistor*, Pomponius Mela, St. Augustine, Albertus Magnus and St. Thomas Aquinas in his book against the curious. Similarly, they can read Aristotle's *Meteorology* and Pliny on the *wonders of the world*, and they will see thousands of things of which I have not mentioned one.[90]

The statement is meant to reinforce belief in the gold-producing lake in Andaman. If one can believe in the petrification of wood and its transmutation into iron, but one step further is the much-fantasized conversion of wood to gold. Fra Mauro forges the connection between extreme north and south by elaborating on the quintessential medieval concept of the marvelous periphery. At the same time, he exploits environmental schemata and Greco-Roman literature on India and the torrid zone, using the less hard-to-believe production of utilitarian metals to the north to amplify the incredible promise of infinite luxury metals to the south.

Figure 23.5 Fra Mauro, World Map; detail, Ireland

This north-south scheme is rooted in the climatic theories of the ancients, but it has seen various iterations throughout the centuries. Right up to our own time, the linking of environment and economic development has been hard to shake. Martin Lewis and Kären Wigen point out this underlying model persists in contrasting an industrialized north to an underdeveloped and hot agricultural southern zone. At the macro level, scholars continue to perceive of the Southern Hemisphere as a "uniform zone of global poverty," rich in natural resources but incapable of economic self-reliance or competent self-governance. The ideal governments are those of the North, along the parallel of Athens and Rome, and the West, peoples that still identify with Greco-Roman history. This perception is rooted in the timelessness of location rather than historically contingent political interventions.[91] Now, as in the fifteenth century, such stratification of world regions is ideologically flexible and intentionally imprecise, but its basis remains the spatialization of potential economic relationships linked to environment and especially to warm climates. This might give us pause to reconsider the ideological and moral implications of Humanism's use of classical geography outside the narrow confines of intellectual history. What role did Ancient models play in articulating a new vision of global exploitation?

Notes

1 Rubiés 2000, 86.
2 Rubiés 2000, 96.
3 Rubiés 2000, 96.
4 Bacon 1928, 323–4.
5 Bacon 1928, 324.
6 Gómez 2008, 49.
7 Bacon 1928, 320.

8 Bracciolini 2004, 166–78; Major 1857, 34–9.
9 Gómez 2008, 74–9: The association of Africans and Indians can be traced to their mutual habitats in the torrid zone from the writings of Herodotus to Pierre d'Ailly, whose work Columbus scrutinized.
10 Arrian 2013, Martin Hammond edition.
11 Plinius Secundus 1938, H. Rackham edition.
12 Gómez 2008, 119–23.
13 Augustine 2000, Marcus Dods edition.
14 Friedman 2000, 39.
15 Macrobius 1990, William Harris Stahl edition.
16 Isidorus Hispalensis 2005, Priscilla Throop edition.
17 Daston and Park 2001, 25–6.
18 Bacon 1928, 320.
19 Gómez 2008, 66–72.
20 Gómez 2008, 42.
21 Gómez 2008, 85.
22 Cattaneo 2011, 198–200; Edson 2007, 141.
23 Edson 2007, 142–51; Scafi 1998.
24 Falchetta 2006.
25 Edson 2007, 141.
26 Falchetta 2006, 59–60.
27 Cattaneo 2011, 227–33; Falchetta 2006, 61–9.
28 O'Doherty and Kosta-Théfaine 2009; Jackson 1998, 84.
29 Falchetta 2006, 711: "Io non credo derogar a Tolomeo se io non sequitio la sua cosmographia, perché se havesse volute observer I sui meridian over paralleli over gradi era necessario quanto a la demonstration de la parte note de questa circumferential lassar molte provincie de le qual Tolomeo non ne fa mention, ma per tuto maxime in latitudine çoè tra ostro e tramontane dice terra incognita, e questo perché al suo tempo non li era nota."
30 Falchetta 2006, 733: "Come la terra supposita a l'equinoctial e a la torrida çona è abitabile."
31 Falchetta 2006, 735.
32 O'Doherty and Kosta-Théfaine 2009, 76–89.
33 Falchetta 2006, 699, 701: ". . . perché certo non è possibile a l'intellecto human senza qualche superna demonstration verificar in tuto questa cosmographia over mapamundi . . . ."
34 Falchetta 2006, 433: ". . . perché dove ho habuto campo ho fato luogi grandi e dove son streto picoli . . . ."
35 Woodward 1987; Woodward 1985
36 Falchetta 2006, 708–9; 717–19: Permia derives from the Finnish account of the ninth-century Norwegian navigator Ohthere, included by Alfred the Great (r. 871–99) in his Anglo-Saxon translation of Orosius' *Historiae adversus Paganos*.
37 Falchetta 2006, 715: ". . . unde me meraveio che questa li sia sta' nota e tuta questa parte de norvegia e svetia li sia sta' ignota."
38 Falchetta 2006, 714.
39 Ptolemaeus 2000, A. Jones and J.L. Berggren edition.
40 Falchetta 2006, 619: ". . . sono chiamati ung e mongul."
41 Polo, Marco 1993, 286. For further uses of Gog and Magog, see Kominko, this volume.
42 Falchetta 2006, 619: "Ma certo questo error è adevenuto per alguni che tirano la sacra scriptura al suo sentiment."
43 Falchetta 2006, 619: "Perhó io me acosto a la auctorità de sancto Augustino, el qual nel suo De Civitate Dei reprove la opinion de queli che dicono che gog e megog significa queli populi che darano favor ad antichristo . . . ."
44 Falchetta 2006, 193: ". . . del mar d'india che'l sia serado come un stagnon . . . ."
45 "A Mossylite promunturio Atlanticum mare incipere vult Iuba, praeter Mauretanias suas Gadis usque navigandum coro . . . ."
46 Solinus 1864, Theodore Mommsen edition. On Juba of Mauritania, see Roller 2003.
47 Falchetta 2006, 201, 203: "Perché ad alguni par da nuovo che io parli de questa meridional, la qual quasi està incognita a li antichi . . . I qual cum le suo man me hano desegnato tute queste provincie e citade e fiume e monti cum li suo nomi." This is a reference to Ethiopian and other envoys. Bracciolini mentions their presence in Florence.

48 Falchetta 2006, 72.
49 Edson 2007, 153.
50 Falchetta 2006, 387.
51 Falchetta 2006, 387: "Perché sono molti cosmographi e doctissimi homeni I qual scrivono che in questa affrica . . . esservi molti monstruosi homeni e animali . . . non trovi mai alguno me ne sapesse dar aviso de quelo io trovo scripto da queli . . . ."
52 Falchetta 2006, 699, 701: ". . . non vogli più curiosamente defenderlo de quell che lui proprio non se defende, el qual nel secondo libro capitulo primo dice che quele parte de le qual se ne ha continua practica se ne può parlar corretamente, ma de quele che non sono cussì frequentade non pensi algun se ne possi parlar cussì correctamente . . . resta che'l conciede che cum longença de tempo tal opera se possi meglio descrivir . . . Per tanto dico che ion el tempo mio ho solicitado verificar Ia scriptura cum la experientia . . . E I diti hano fato nuove carte de quell navigar e hano posto nomi nuovi a fiumere, colfi, cavi, porti, di qual ne ho habuto copia."
53 Azurara 1963, 27–9: Azurara gives six reasons why the Infante Henry wanted to explore the West Coast of Africa beyond Cape Bojador. The first two reasons are new commodities and markets.
54 Falchetta 2006, 211, 213: "Molte opinion e leture se trova che in le parte meridional l'aqua non circunda questo nostro habitabile e temperado çona, ma aldando molte testimoniançe in contrario e maxime queli I qual la maiestà del Re de portogallo à mandato cum le suo caravale a çerchar e veder ad ochio . . . ."
55 Friedman 2000, 37–56.
56 Falchetta 2006, 339, 341: "Nota che alguni istoriographi, di quali sono Ariano e Solin et etiam Dionisio, el qual fo mandado da Re Philadelpho ad investigar de l'india, questi dicono de le indie molte cosse notabile, e de monti e de fiumi . . . Item de citade, castelli, inumerabel populi uarietà, condition, costume . . . diversità de monstri quasi incredibili e de homini e de animali. . .Item de fructi pretiosi e legni et herbe . . . e diversità de çoie, id est diamanti, lichiniti, berrilli, chrisoberilli, chrisoberilli, chrisopassi, iacinti e molte altre cosse che dir non posso."
57 Friedman 2000, 55–8.
58 Falchetta 2006, 221–23, 233.
59 Woodward 1990, 120.
60 ". . . quo in omni tractu proditur tres tantum gentes Graecas iure dici . . . ceteras barbarorum esse."
61 Uebel 2005, 15–19; Lewis and Wigen 1997, 23–5.
62 Bracciolini 2004, 124: "Relicta Coloena, ad urbem Chocin trium dierum itinere transit, .V. milibus pas. Ambitu, supra hostium flumini, a quo et nomen traxit, sitam. Aliquandiu nauigans in flumine conspexit noctu supra ripan frequentes ignes fieri. Existimans piscatores esse, quaesiuit quidnam ii continius noctibus agerent. At illi, qui in naui errant, ridentes, *Icepe, icepe* dixerunt. Hi sunt forma humana, siue pisces siue monstra appellari licet, quae noctu aquam exeuntia, collectis lignis, atque igne ex collisione lapidum excitato, ligna comburunt iuxta aquam, ac pisces, qui plurimi ad splendorem ignis concurrunt, captos edunt, interdiu latentes in aqua. Hos aliquando a se captos nihil a forma hominis differre masculos ac feminas dixerunt" (Major 1857, 19).
63 Bracciolini 2004, 12, 14; Major 1857, 3–4.
64 "Praecipue India Aethiopumque tractus miraculis scatent."
65 Catalani 1863, 37.
66 Odoric 1998, 176.
67 Azurara 1963, 7.
68 Falchetta 2006, 575–7.
69 ". . . perpetua caligo utrobique et alieno molliorum . . . media vero terrarum . . . exusta flammis et cremate comminus vapore torretur."
70 Ptolemaeus 1940, F.E. Robbins edition.
71 ". . . medio vero terrae salubri utrimque mixtura fertiles ad omnia tractus, modicos corporum habitus magna et in colore temperie, ritus molles, sensus liquidos, ingenia fecunda totiusque naturae capacis, isdem imperia, quae numquam extimis gentibus fuerint . . . ."
72 Buron 1930; Flint 1992, 44–5.
73 Hiatt 2008, 176: "India fere terciam partem terre habitabilis continent, versus meridiem se extendens."
74 Hiatt 2008, 176: "Fons Indie meridianus secundum quosdam protenditur usque tropicum capricorni; Orientale vero latus usque prope finem affrice."
75 Hiatt 2008, 146: "Ante climate versus equinoctialem et vltra multas habitations continent. Vt ex historiis autenticis compertum est."
76 Flint 1992, 170–71.

77 Mandeville 1983, 109.
78 Falchetta 2006, 181–3: ". . . sono formosi homeni, forti e çentil e boni astrologi . . . Sono anchora maçor de statura che queli che nasceno in india e li lor elefanti maçor de queli de le indie . . . e questo è per el suo optimo sito e bonità d'aiere."
79 Riera I Sans 1975, 3.
80 Grosjean 1978, 92: "Aquesta gent són salvatges que viuen de peyx cruu e beuen de la mar e van tots nuus."
81 Grosjean 1978, 92: "Mar de les illes delles Indies hon són les espècies, en la qual mar navega gran navelli de diverses gens."
82 Grosjean 1978, 52–3: "Les iles Beneventurades són en lo mar gran contra la mà squerra prop le terme del occident, mes però són dintre la mar. Isidori ho diu al se[u] XV libre, que aquestes són dites Beneventurades quar de tots béns, blats, truyts, herbes, arbes són plenes, e los pagans se cuiden que aquí sta parais per lo temperament del sol e habundància de le terra . . . Diu Pli[ni]us, maestre de mapamundi, que en les yles Fortunades he una ylla un se leven tots los béns del mon, con sense semrar e sens plantar leva tots fruits en les altees del monts, los arbes no són nulh temps menys de fulla e de fruits ab molt gran odor . . . Per questa rahó tenen los pagans de les Indies que les lurs ànimes con són morts se'n van en aquelles yles e viuen per tots tot temps de la odor d'aquels fruits, e allò creen que é slur paradis, mes segons veritat faula és."
83 Grosjean 1978, 52.
84 Grosjean 1978, 88: "En la illa lana ha molts arbres, lianyloes, camphora, sandels, species subtils, garenga, nou moscàda, arbres [de cnyela, la] qual és pus preciosa de qualseyol altra de tota la India . . . ."
85 Edson 2007, 145.
86 Falchetta 2006, 445, 447: "San Hieronymo nel prohemio de la Bibia dice che Apolonio phyosopho passò questo fiume phison e vene ad alguni popoli diti bragmani . . . Questo dico perché questi popoli, çoè bragmani, massageti, polibotri, pignei, pandi, astiacani e de altri che de qui se scrive esser, a nui non sono noti molto, perhò de li lor costume et habiti discrepatissimi che ne vol haver notitia leça Ariano e Strabo, I qual de questa india scriveno copiosamente."
87 Falchetta 2006, 227: ". . . è habità per çente idolatra e sorteri e crudeli."
88 Falchetta 2006, 227: ". . . e per molti se dice esser uno lago in questa isola che metandoli ferro deventa oro, e questo io dico a satisfaction del testimoniar de molti."
89 Catalani 1863, 29.
90 Falchetta 2006, 579: ". . . se dice esser una aqua ne la qual chi li mete legno quela parte che è ne la terra cum tempo deventa ferro e quela è circumdada da l'aqua deventa piera e quela è sopra aqua riman legno, e se questo se crede se pò ancor creder de lago de Andaman, e queli che de queste cosse mirabile e de alter monstruose desiderano esser copiosi, leçano Julio Solin polistoro, Pomponio Mela, sancto Agustino, Alberto Magno, sancto Thomaso de Aquin nel libro contra I curiosi, item le Metaure d'Aristotile e Plinio de le meraveie del mondo e vederano che de mile cosse non ne ho dite una." Mittman 2003: The practice of comparing marvels of Ireland and India was long-standing.
91 Lewis and Wigen 1997, 5–6.

Bibliography

Augustine (Dods, Marcus, trans.). 2000 [1950]. *The City of God*. New York: Modern Library.
Arrian. 2013. *Alexander the Great: The Anabasis and the Indica*. Edited and translated by Martin Hammond. Oxford: Oxford University Press.
Azurara, Gomes Eannes de. 1963. *Chronicle of the Discovery and Conquest of Guinea*. Translated by C. Raymond Beazley and Edgar Prestage. Vol. 1. New York: Burt Franklin.
Bacon, Roger. 1928. *Opus Majus*. Edited and translated by Robert Belle Burke. Vol. 1. Philadelphia: University of Pennsylvania Press.
Bracciolini, Poggio. 2004. *De l'Inde: Les Voyages En Asie de Niccolò de' Conti: De Varietate Fortunae Livre IV*. Edited and translated by Michèle Guéret-Laferté. Turnhout: Brepols.
Buron, Edmond, ed. 1930. *Ymago Mundi de Pierre d'Ailly: Texte Latin et Raduction Français Des Quatre Traites Cosmographiques de d'Ailly et Des Notes Marginales de Christophe Colomb*. Vol. 1. Paris: Maisonneuve Frères.
Catalani, Jordanus. 1863. *Mirabilia Descripta: The Wonders of the East by Friar Jordanus*. Translated by Henry Yule. London: Hakluyt Society.

Cattaneo, Angelo. 2011. *Fra Mauro's Mappa Mundi and Fifteenth-Century Venice*. Turnhout: Brepols.
Daston, Lorraine, and Katharine Park. 2001. *Wonders and the Order of Nature, 1150–1750*. New York: Zone Books.
Edson, Evelyn. 2007. *The World Map, 1300–1492: The Persistence of Tradition and Transformation*. Baltimore, MD: Johns Hopkins University Press.
Falchetta, Piero. 2006. *Fra Mauro's Map of the World: With a Commentary and Translation of the Inscriptions*. Translated by Jeremy Scott. Turnhout: Brepols.
Flint, Valerie J. 1992. *The Imaginative Landscape of Christopher Columbus*. Princeton, NJ: Princeton University Press.
Friedman, John Block. 2000. *The Monstrous Races in Medieval Art and Thought*. Syracuse, NY: Syracuse University Press.
Gómez, Nicolás Wey. 2008. *The Tropics of Empire: Why Columbus Sailed South to the Indies*. Cambridge: Massachusetts Institute of Technology Press.
Grosjean, Georges, ed. 1978. *Mapamundi, the Catalan Atlas of the Year 1375*. Dietikon: Urs Graf.
Hiatt, Alfred. 2008. *Terra Incognita: Mapping the Antipodes before 1600*. London: British Library.
Isidorus Hispalensis. 2005. *Isisdore of Seville's Etymologies: The Complete English Translation of Isidori Hispalensis Episcopi Etymologiarum Sive Originum Libri XX*. Translated by Priscilla Throop. Vol. 1. Charlotte: Medieval MS.
Jackson, Peter. 1998. "Marco Polo and His 'Travels.'" *Bulletin of the School of Oriental and African Studies, University of London* 61: 82–101.
Lewis, Martin W., and Kären E. Wigen. 1997. *The Myth of Continents: A Critique of Metageography*. Berkeley: University of California Press.
Macrobius, Ambrosius Theodosius. 1990. *Commentary on the Dream of Scipio*. Translated by William Harris Stahl. New York: Columbia University Press.
Major, Richard Henry, ed. and trans. 1857. *India in the Fifteenth Century: Being a Collection of Narratives of Voyages to India in the Century Preceding the Portuguese Discovery of the Cape of Good Hope, from Latin, Persian, Russian, and Italian Sources*. Cambridge: Cambridge University Press.
Mandeville, John. 1983. *The Travels of Sir John Mandeville*. Edited by C.W.R.D. Moseley. Harmondsworth: Penguin Books.
Mittman, Asa Simon. 2003. "The Other Close at Hand: Gerald of Wales and the 'Marvels of the West.'" In *The Monstrous Middle Ages*, edited by Bettina Bildhauer and Robert Mills, 97–112. Toronto: University of Toronto Press.
O'Doherty, Marianne, and Jean-François Kosta-Héfaine. 2009. "'They Are Like Beasts, for They Have No Law': Ethnography and Construction of Human Difference in Late-Medieval Translations of Marco Polo's Book." In *Travels and Travelogues in the Middle Ages*, 59–93. New York: AMS Press.
Odoric Pordenone. 1998. *Cathay and the Way Thither: Being a Collection of Medieval Notices of China: Odoric of Pordenone*. Edited by Henry Yule and Henri Cordier. Translated by Henry Yule. 2nd edn. Vol. 2. London: Hakluyt Society.
Plinius Secundus, Gaius. 1938. *Naturalis Historia*. Edited and translated by H. Rackham. Vols. 1 and 2. London: William Heinemann.
Polo, Marco. 1993. *The Travels of Marco Polo*. Edited by Henry Yule and Henri Cordier. Translated by Henry Yule. 4th edn. Vol. 1. New York: Dover Publications.
Ptolemaeus Mathematicus. 2000. *Ptolemy's Geography: An Annotated Translation of the Theoretical Chapters*. Edited by A. Jones and J.L. Berggren. Princeton, NJ: Princeton University Press.
——. 1940. *Tetrabiblios*. Translated by F.E. Robbins. Cambridge, MA: Harvard University Press.
Riera I Sans, Jaume. 1975. "Cresques Abraham, Jew of Majorca, Master of Mappaemundi and Compasses." Translated by Juan Ceva. The Cresques Project: http://www.cresquesproject.net/translations, accessed June 21, 2014.
Roller, Duane W. 2003. *The World of Juba II and Kleopatra Selene: Royal Scholarship on Rome's African Frontier*. New York: Routledge.
Rubiés, Joan-Pau. 2000. *Travel and Ethnology in the Renaissance: South India through European Eyes, 1250-1625*. Cambridge: Cambridge University Press.
Scafi, Alessandro. 1998. "Il Paradiso Terrestre di Fra Mauro." *Storia dell'Arte* 93/94: 411–19.
Solinus, Caius Julius. 1864. *Collectanea Rerum Memorabilium*. Edited by Theodore Mommsen. Berolini: In aedibus Friderici Nicolai.
Uebel, Michael. 2005. *Ecstatic Transformation: On the Uses of Alterity in the Middle Ages*. New York: Palgrave Macmillan.

Woodward, David. 1987. “Medieval Mappaemundi.” Edited by David Woodward and J.B. Harley. *Cartography in Prehistoric, Ancient and Medieval Europe and the Mediterranean*. The History of Cartography. Chicago, IL: University of Chicago Press.

——. 1985. “Reality, Symbolism, Time, and Space in Medieval World Maps.” *Annals of the Association of American Geographers* 75: 510–21.

——. 1990. “Roger Bacon’s Terrestrial Coordinate System.” *Annals of the Association of American Geographers* 80: 109–22.

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